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# THE THEORY OF CREDIT

BY

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SELECTED BY THE ROYAL COMMISSIONERS FOR THE DIGEST OF THE LAW TO PREPARE  
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## PREFACE

I have found it necessary to enlarge this Volume very considerably

When some few years ago a movement was started to abolish our present system of Coinage, the most perfect and successful ever devised by the ingenuity of man, and to restore the old Bimetallic System, which, after having been vainly attempted to be maintained for five hundred years, had been finally abandoned as hopeless, impracticable and injurious, it seemed so contrary to demonstrated Science that most persons thought that it was not worth any attention

But such is no longer the case. This movement has had such an unexpected extension, and met with such wide support from numerous and influential persons in nearly every country, that it can no longer be neglected. There is no graver and more momentous Economic question at the present day, nor one which is at the present time being more hotly discussed throughout the world

I have, therefore, found it necessary to give the whole subject of the Coinage much greater prominence than it received in the previous edition. I have given a chapter to explain the general principles of the Coinage, and also one specially to Bimetalism

The gradual adoption by most of the European States of a single Gold Standard, coined in unlimited quantity, and made legal tender to any amount, with Coins of other metals such as Silver strictly limited in quantity, and made only subsidiary to the Standard Unit—which is termed **Monometalism**—is one of the most important Economical events of the nineteenth century. But comparatively few even of the persons who acquiesce in this system as being established and successful, are fully informed of the historical facts and arguments on which it is founded. The

purpose of this chapter is to give a succinct, but sufficiently full account of the indubitable historical facts, and the incontrovertible arguments which a long series of illustrious men during five centuries have based upon these facts, upon which the modern system of Monometalism is founded, and to examine whether the Bimetallists have brought forward any sound reasons for invalidating them and reverting to the former system

The whole of this vast controversy is reducible to a single simple and definite issue

Supposing that Gold and Silver are coined in unlimited quantities, and a Fixed Legal Ratio is enacted between them—

(1) Is it the Legal Fixed Ratio enacted between the Coins which governs the relative Value of the metals in Bullion?

(2) Or is it the relative Value of the metals in Bullion which governs the relative Value of the Coins?

(3) And if it be found impossible for any single State to maintain Gold and Silver coined in unlimited quantities in circulation at a Fixed Legal Ratio, is it possible for any number of States combined to do so by an International Agreement?

This is the whole gist of the controversy, and all facts and arguments adduced must be directed to establish one or other of these points. All descriptions, however long, or however true, of the unfortunate state of commerce at the present time, are utterly irrelevant and beside the question, and must at once be dismissed from consideration. This issue, which is the sole point in the case, is not to be determined by assertions evolved out of the inner consciousness of any persons, however numerous and influential, but by a strict investigation of the history of the Coinage in different countries, and by solid arguments formed on the observation of these facts

I have given succinct, but I hope sufficient, notices of the

attempt to maintain Bimetallism in England and France for five hundred years, and its total failure and final abandonment in these countries

In both countries it was attempted to maintain unlimited quantities of Gold and Silver in circulation at a Fixed Legal Ratio, but it totally failed. Oresme in France, Copernicus in Poland, and Gresham in England demonstrated that the relative Value of the metals in Bullion governs the relative value of the Coins: and that if the Fixed Legal Ratio between the Coins differs from the market, or natural, Value of the metals in Bullion, the Coin which is underrated invariably disappears from circulation, and the Coin which is overrated alone remains current

• As it was, however, found to be impossible to be constantly adjusting the Fixed Legal Ratio of the Coins to the perpetually varying Value of the metals, Petty, Locke, and Harris demonstrated that the true remedy was to adopt **One** metal only as the Standard Unit, and to issue Coins of other metals only as subsidiary to the Standard Unit. This doctrine was enforced in a masterly treatise by Lord Liverpool in 1805, was entirely approved of by the Governor-General of India in Council in 1806, and was finally established by Law at the great recoinage of 1816. And ever since then England has enjoyed the most perfect system of Coinage ever devised by the ingenuity of man, and has been perfectly free from all Coinage troubles

I am fortunate in being able to bring before my readers an experience which is wholly novel to the general public, and is of overwhelming weight

Mr. Robert Chalmers, of the Treasury, author of a very useful History of Colonial Currencies, informed me that the Governor-General of India in Council had issued a most important Minute on Bimetallism in 1806



Upon making application to the India Office, I was at once most courteously permitted to take a copy of this Minute and to publish it. I have given *verbatim* extracts of such parts of it as relate to Bimetalsim, which are now for the first time made public, and they are of decisive weight in the present discussion.

It will be seen that the Indian Government, being plagued and tormented by the multitude of Gold and Silver Coins—994 in number—circulating in India of different weights and fineness, attempted to establish Bimetalsim in India in 1766. But the attempt wholly failed, and having had ample experience of Bimetalsim in all its forms, denounced and renounced it and all its woes, and declared its adoption of Monometalsim. Most unfortunately, when they had the choice of either metal, they adopted Silver exclusively, and totally demonetised Gold, which has been the cause of all our present troubles

It will be seen that the illustrious authorities I have cited, with the ample experience of centuries before them, have unanimously demonstrated that it is the relative market Value of the Metals which governs the relative Value of the Coins—and not the reverse, as the Bimetalsists assert. The Fixed Legal Ratio of the Coins never had the least effect on the market Value of the Metals. During all this long period of time not a single person supported the doctrine now maintained by the Bimetalsists.

It was demonstrated by the inexorable logic of facts and incontrovertible arguments that—“*The Worst form of Currency in circulation regulates the Value of the whole, and drives all other forms out of Circulation.*” This great fundamental Law of the Coinage is just as firmly established as the Law of Gravitation. It is absolutely universal. It is not limited in Time or Space. It is true through however large an area it operates

When, therefore, the Bimetalsists assert that the Law which has been found to hold good in all ages and in every single and separate State can be set aside and overruled by an International

Agreement, it is just as rational to say that if all single States cannot set aside the Law of Gravitation, an International Agreement can do so—or to say that if any number of single States cannot regulate the course of the Moon, an International Agreement can do so

But to determine all the issues raised by the Bimetallists much wider considerations are necessary

The rock upon which the Bimetallists, and most other persons who chatter about the Currency, founder, is that they consider Gold and Silver only to be the Currency, or Circulating Medium of the world, and the Measure of Prices

• But the Currency, or Circulating Medium, consists not only of Specie—Gold, Silver, and Copper—but also of **Credit** in all its forms, both written and unwritten

The Bimetallists persistently assert that the commercial *malaise* which prevails throughout the world at the present time is due to the Scarcity and Appreciation—as they are pleased to term it, by which they mean the rise in the Value—of Gold. They attribute this to the Demonetisation of Silver, and they allege that this fall in the Value of a certain number of commodities is due to the fact that Gold has to do double duty. They allege that if Gold and Silver were coined in unlimited quantities at a Fixed Legal Ratio, it would increase the Currency, or Circulating Medium, of the world

Now, in the first place, no country whatever has Demonetised Silver: all they have done is to restrict its quantity. In the second place, the history of the Coinage in different countries proves that in no country whatever did Gold and Silver ever circulate together in unlimited quantities at a Fixed Legal Ratio. But they alternately drove each other out of circulation, as one or the other was overrated or underrated by the Fixed Legal Ratio. And it is a pure delusion to suppose that coining

Gold and Silver in unlimited quantities at a Fixed Legal Ratio would augment the Currency of the world

All these assertions are the coinage of the vain imagination of the Bimetallists, arising from their neglecting to study the history of the Coinage in different countries, and their ignorance of the rudimentary Laws of Economics

In the next place, they totally omit the consideration of what they might see in any Treatise on Economics, that **Rights of action, Credits, or Debts**, have exactly the same effects on Production and Prices as an equal quantity of Gold

In this Treatise we have given a complete exposition of the Juridical and Scientific principles of Credit : and the organisation and mechanism of the colossal system of Credit, both Mercantile and Banking : and to apprehend the subject of Bimetallism, it is necessary to consider it in combination with the system of Credit.

The fact is we have long passed through the ages of Gold and Silver—we are now in the age of **Credit, or Paper**. Gold and Silver are only now used in small daily and retail transactions to serve as pocket-money. All operations in Commerce and Trade are now carried on by means of **Rights of action, Credits, or Debts** : and the only use of Gold now in commerce is for Banks to keep such strong reserves of Gold, as to inspire the public with confidence that they can pay their Credits at any moment on demand. I have shown that Credits, or Circulating Debts, now constitute 99 per cent. of the Currency in this, and other great mercantile countries

To treat of the question of the Currency, or Circulating Medium, or the Measure of Prices, at the present day, and to include only Gold and Silver under that title, and to leave out all consideration of the colossal system of **Credit**, is just as irrational as it would be to write a general treatise on Mathematics, and to leave out all mention of the Differential Calculus and its developments—or to write a treatise on the Conveyances of the present

day, and to include only pack horses, stage coaches and stage wagons, and to omit all mention of Canals, Railroads and Steamers—or to write a treatise on Machines and to leave out all mention of the Steam Engine

In fact **Banking Credits** are now for all practical purposes the **Current Coin** of the **Realm**: and to show what a mass of Banking Credits may be built on a very slender basis of Specie, we may take the example of dear old Scotland, because it has the best organised system of Banking in the world. It appears by the last official accounts, that with a reserve in Gold of £4,866,511 the Scottish Banks are able to support Banking Credits to the amount of £92,240,356. These 92 millions of Banking Credits have exactly the same effects in all respects as an equal quantity of Gold. And when, by a well-organised system of Banking, it is found possible for all practical purposes to multiply less than 5 millions of Gold into more than 92 millions, what becomes of the baseless cry of the Bimetallists of the Scarcity and the Appreciation of Gold?

• If any one wishes to comprehend the marvellous powers of a well-organised system of Banking, let him study the mechanism of the Banking System of Scotland, given in this work, and he will then see the force of the aphorism of Demosthenes—"If you were ignorant of this that **Credit** is the greatest **Capital** of all towards the acquisition of Wealth, you would be utterly ignorant:" and of the aphorism of Daniel Webster—"Credit has done more, a thousand times, to enrich nations than all the mines of all the world"

Thus all the assertions of the Bimetallists are melted into air, into thin air, leaving not a rack behind

Bimetallists complain that they never can get Monometallists to answer their *facts* and *arguments*. The answer is very simple. They never do adduce any real facts or arguments. Monometallists may have a vague general idea that their system is the

right one, but very few have any real knowledge of the historical facts and the arguments based on these facts, upon which the system of Monometalism is founded. I have given in this chapter a succinct, but sufficiently full, statement of the facts and arguments upon which Monometalism is founded, and by which Monometalists must defend it—and also to show Bimetallists the facts and arguments which they have to assail, controvert, and overthrow—if they can—before they are entitled to a hearing

The following selection of Works contains the historical Facts of the case—

**Ruding**, Annals of the Coinage of England. 3 vols. London, 1810

**Le Blanc**, Traité historique des Monnoyes de France. Paris, 1692

**St. Maur**, Essai sur les Monnaies. Paris, 1746

**de Bazinghen**, Traité des Monnaies. Paris, 1764

An abstract of these Works is given in Macleod's Dictionary of Political Economy, London, 1862

The History of the Coinage of India

The History of Inconvertible Paper Money in numerous countries.

**Chalmers**, History of the Colonial Currencies. London, 1893

With numerous other works on the Coinage of other countries à volonté

And for incontrovertible Arguments founded on these facts the following may be selected—

**Oresme**, Traictie de la première Invention des Monnoies. About 1366

**Copernicus**, Monetæ eudendæ Ratio. 1526

**Sir Thomas Gresham**, Letter to Queen Elizabeth. 1560

**Sir William Petty**, Political Anatomy of Ireland. 1691

**Locke**, Considerations concerning the raising of Value of the Money. 1692

- A Reply** to the Defence of the Bank, setting forth the unreasonableness of their slow payments. London, 1696
- Harris** on Coins. About 1750
- Sir James Steuart**, The principles of Money applied to the present state of the Coin of Bengal. 1772
- Lord Liverpool**, Treatise on the Coins of the Realm. 1805
- Minute** of the Governor-General of India in Council. 1806
- Given in this Work
- Speech of **Mr. Wellesley Pole**, Master of the Mint, on introducing the Resolutions in the House of Commons, on which our present system of Coinage is founded. 1816.  
Parliamentary Debates, vol. xxxiv., col. 860
- Debate** on **Bimetalism** in the House of Commons. 1830.  
Parliamentary Debates, N.S. vol. xxv., col. 101
- Despatch** of **Sir Charles Wood**, Secretary of State for India, to the Government of India. September, 1864
- Besides innumerable other Tracts and speakers *à volonté*

These are a sufficient selection of works containing the historical *facts* and incontrovertible *arguments* upon which our present system of Coinage is founded. Let the Bimetalists retire to their studies, read, learn, mark, and inwardly digest the above works, and consider what answer they can give to them. Until they have done that they should be silent

There is only one way by which this vast and wearisome controversy can be brought to a satisfactory conclusion. It is not to be decided by cheering mobs, or the votes of popular assemblies like the House of Commons. For better or for worse we are in for Democracy in Politics, but may a merciful Providence preserve us from Democracy in Science. Where would our sublime system of Astronomy, or the beautiful mathematical theory of Light be, if they had to be submitted to the judgment of the yokels of Cambridgeshire?

Let a Royal Commission be appointed, composed exclusively of Law Lords and Bankers and Merchants of the highest sagacity and experience, forming a strictly Judicial Tribunal. Let the Bimetallists, as being the assailing party, appear before it, and be required to prove all their allegations and assertions by strictly legal and historical evidence, on every single point of which there exist vast masses of indubitable evidence, which are readily available

When the Bimetallists are called upon to substantiate their allegations and assertions before such a tribunal, they will find themselves very much in the case of Shadrack, Meshak, and Abed-nego when cast bound into the burning fiery furnace—but they will not escape so easily as those young gentlemen did

Under the fierce light of strict legal cross-examination they will find that all their gaseous assertions have infinitely less substance in them than the most attenuated Comet that ever visited the Solar System

Why should Bimetallism in the nineteenth century produce results in any way different from those it has produced in all preceding ages?

All descriptions of the commercial depression which at present indubitably prevails throughout the world must be entirely excluded from consideration. The sole question is whether the remedy which the Bimetallists propose is possible, and whether it would do anything to alleviate that depression

The sole question is—Whether it is the Fixed Legal Ratio of the Coins which governs the relative Value of the metals in Bullion? or—Is it the relative Value of the metals in Bullion which governs the relative Value of the Coins?

And when the question is reduced to this single definite issue, there are mountains and mountains of evidence—not only Ossa piled upon Pelion, but the Himalayas piled upon them, in favor of the Monometallic system. Whereas there is not the faintest

shadow of the shade of the ghost of the  $n^{\text{th}}$  differential co-efficient of a pin's point of evidence in favor of the contention of the Bimetallists. It is absolute **Zero**

The evidence of history and the arguments of a series of the most illustrious men for five centuries are perfectly clear, unanimous and decisive of the fact that it is the relative market Value of the metals which governs the relative Value of the Coins—and not the reverse, as the Bimetallists allege. During all this long period there was not a single person who held the present doctrine of the Bimetallists: the evidence against it from practical experience was too overwhelming

The Bimetallists assert that fixing a Legal Ratio between Gold and Silver by International Agreement would establish a stable exchange between England and India, but as shown in Chapter X., § 3, it was proved before a Committee of the House of Lords that it is impossible to have a Fixed Par of Exchange between countries which use different metals as their Standard Unit

All the assertions of the Bimetallists are the coinage of their own vain imagination. And when the delusive mirage of visionary dreams of boundless prosperity to follow the adoption of their system, propagated by the Bimetallists, is scrutinised by the all-seeing eye of Knowledge, it will be found that the hideous reality is **National Bankruptcy**

If the Bimetallists were entrusted with the reins of national Economical policy, they would surely and swiftly produce such a catastrophe as Phaethon did when he tried to guide the coursers of the Sun

The Bimetallists may rest assured that the Monometallic Jericho is an impregnable fortress, whose walls will never fall before the blare of the Bimetallic trumpets, blare they ever so wild and loud and long

To all persons, and they are many, who have neither time nor inclination to enter into all the mazes of this vast and intricate



controversy, I would offer the following broad general considerations—

1. The assertion of the Bimetallists that it is possible to regulate the relative Value of Gold and Silver by International Agreement is flatly contradicted by—

(1) The History of Bimetallism in every country

(2) The unanimous arguments of Oresme—Copernicus—Gresham—Petty—Locke—Newton—Harris—Sir James Stenart—Lord Liverpool—the Government of India—the British Government, and hosts of other experienced persons who had the consequences of Bimetallism before their eyes

(3) That in no country whatever has it ever been found possible to maintain Gold and Silver in circulation in unlimited quantities at a Fixed Legal Ratio: but that after attempting to maintain Bimetallism for centuries, every State in Europe has been obliged to abandon it as impracticable and injurious

(4) That the circumstances of the present times are totally different from what they were when it was attempted to maintain Bimetallism

(5) That Mr. Herries, Mr. Huskisson, and Sir Robert Peel declared that the attempt to re-introduce Bimetallism under our present circumstances, would instantly lead to a **National Bankruptcy**

(6) That, as I have shown, France, with her internal Currency consisting exclusively of Silver, cannot adopt Bimetallism *at any Ratio* under the penalty of instant **Bankruptcy** and **Ruin**. That at once precludes France from listening to *any* scheme of Bimetallism: and if France cannot join, what becomes of the hopes of the Bimetallists?

If the Bimetallists were to propose to cut every sovereign in half—or to debase every sovereign with 50 per cent. of alloy—and to compel every Creditor to accept such half-sovereign or debased sovereign as a Pound in the payment of a debt—that

would be too manifest a fraud to impose upon the most stolid Philistine. Nevertheless, they propose to do the very same thing by a circumbendibus. They propose to take 20s. in silver, which are at present worth less than 10s. in gold—to declare them equal in value to 20s. in gold, or a Pound—and to compel every Creditor to accept these 20s. in silver at the value of a Gold Pound. Such a transparent juggle would not impose upon the dullest School Board urchin in the dullest Board School in the kingdom.

In plain English the proposal of the Bimetallists is simply to **Debase** the currency by more than 50 per cent.

I should hope that these considerations, stated in plain terms, will be sufficient to induce all intelligent persons rigorously to close their ears to the pipings of the Seirens of Bimetallism, pipe they ever so sweetly.

And now the last crushing blow has fallen upon the Bimetallists. The German agriculturalists, deluded by the idea that Bimetallism would raise the price of corn, worried the Government into appointing a Commission on the subject, and the Commission have agreed that the price of silver cannot be raised by International Agreement. So vanish the last flickering hopes of the Bimetallists.

Nevertheless, let not the Bimetallists relax their energies. Let them only change the direction of their efforts. Let them at once and for ever abandon their visionary chimera that things can be made equal by some words printed in a book, which are by nature unequal. Let them give up their vain delusion that an International Agreement can make 6 equal to 12. Let them cease from their vain objurgations, which can no more alter the Laws of Nature than the ripple of the summer sea can wash away Ailsa Craig. Let them unite their forces heart and soul with those who are urging the Government to complete their work,

and to satisfy the universal demand of India for the restoration of the Gold Standard and Currency, with a subsidiary Currency of Silver, modelled on such of the European systems as the wisest and most experienced experts may deem most suitable for the circumstances of India. For let them be assured there is no possibility of bringing about a stability of Exchange between England and India until the two countries have a common Standard Unit, and there never can be Monetary Peace in India until the **Gold Sovereign** is made the **Standard Unit** throughout the whole **British Empire**

HENRY DUNNING MACLEOD

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## CHAPTER XII

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# CREDIT

## CHAPTER VI

### THE THEORY OF THE COINAGE

#### *On Bullion and Coin*

1. Almost all nations, even the rudest, have felt the necessity of employing some substance to perform the functions of Money. We have noticed in a former chapter most of the substances which have been used for this purpose by different nations. A metal, however, of some sort has been found to possess the greatest advantages, and of metals gold, silver, and copper have been chiefly preferred.

Gold and silver, however, in a perfectly pure state, are too soft to be used for this purpose, and it is necessary to mix some other metal with them to harden them. By a chemical law, when two metals are mixed together, the compound is harder than either of them in a pure state.

When Gold and Silver are in the mass they are called **Bullion**. But as the laws of all nations in which Bullion is coined into money define the quantity of alloy to be mixed with the pure metal, we shall use the word Bullion to mean gold and silver in the mass, mixed with such a proportion of alloy as is ordered by law, so as to be fit to be coined.

The purity of Gold is measured by 24th parts termed **Carats**: and ever since the 6th Edward VI. (1553), the bullion used for the gold coinage has been 22 carats of pure gold and 2 carats of alloy. This is called **Crown Gold**

William the Conqueror fixed the standard of Silver Bullion at 11 ozs. 2 dwts. of pure silver, and 18 dwts. of alloy. And, except during a short period of confusion from the 34th Henry VIII. (1543) to Elizabeth, it has never been departed from. It is called the "Old right standard of England" or "**Sterling**": and as the Sovereigns of England, though they reduced the weight of the coin, never, with the slight exception just mentioned, debased its purity, Sterling came to signify honest and true, or to be depended upon

In France and those countries which have adopted a decimal coinage bullion is made of 9 parts of pure metal and 1 part alloy: but it is found in practice that the English proportion gives greater durability to the metal, and is, therefore, better adapted for a coinage

Some nations have used simple bullion as Money. But the merchants of those nations were obliged to carry about with them scales and weights to weigh out the bullion on each occasion. This was usual among the Jews. In some countries it was necessary to both to weigh and assay the bullion at each operation, which was, of course, a great impediment to commerce

Other nations adopted a more convenient plan. They divided the bullion into pieces of a certain definite weight, and affixed a public stamp on them to certify to the public that they are of a certain fixed weight and fineness: and they gave them certain names by which they were commonly known

These pieces of bullion issued by public authority, with a stamp on them to certify their weight and fineness, and called by a definite name, and intended to be used in commerce without further examination, are called **Coins**

When nations discontinued the practice of direct barter, and adopted the precious metals as a measure of value, the expedient of cutting the metal into pieces of a definite weight and fineness seems so obvious, that we should naturally expect that coining

was invented by those nations which first adopted the precious metals as Money

Strange as it may appear, however, it is certain that this was not the case. Silver and gold were used as measures of value for ages before coining was thought of : and there is every reason to believe that coining was invented by a people who up to that time had never used gold and silver as Money : and coining was practised by them for centuries before it was adopted by nations who had used the precious metals as Money for ages

It has indeed been disputed whether Money or Coin was in use in the times of the Homeric poems. Some critics have contended that in certain passages where Homer uses the word *βοῦς* he meant coins of that name, as there certainly were in after ages : but after having gone over the Homeric poems for this express purpose, we are satisfied that there is not the faintest allusion to anything like Money in them

Not only do we find no allusion to Money in Homer, but the words significative of wealth give no preference to the precious metals above other things. On the contrary, they are comparatively rarely mentioned. The Homeric words expressive of wealth most frequently refer to cattle, or horses, or agriculture. Thus we have *πελύρρην, πολυβοῦτης, πολύϊππος, φιλοκτέανος, πολυπάμων, ἄφνειος, πολυκτήμων, πολυλῆϊος*. In *Iliad* vii., 180, and xi., 46, are almost the only instances in which gold is especially alluded to as wealth—*πολυχρύσοιο Μυκῆνης*. When the Greek and Trojan leaders send spies to discover the plans of the enemy, neither of them promises Money as a reward. Nestor, *Iliad*, x., 215, promises to the successful spy a black ewe with its young, a matchless gift : and Hector, x., 305, promises on his side a chariot and a pair of horses

The Homeric poems probably originated while the Achæans were the rulers of Greece, and before the Dorian conquest, though they may have been "edited" after that period. At that period, therefore, we have seen that there was no Money of any sort in Greece, nor even were gold and silver used as measures of value. But some time after this, though how long we cannot say, a Money of a curious nature came into use throughout Greece.

They used large iron or copper nails, or skewers, called ὀβελίσκοι, of such a size that six of them made a handful : and when silver was substituted, the standard silver coin of the Greeks—δράχμη—derived its name from the fact that it represented the value in silver of a handful of these nails or skewers. They are mentioned in Plutarch in his life of Lysander, § 17. He says that Lysander sent a quantity of gold and silver money to Sparta by Gylippus, who stole a part of it : and this being discovered, made the chief Spartans demand that all the gold and silver should be sent away as a foreign nuisance : and that they should use nothing but their own national coin, which was of iron, and tempered with vinegar, so as to render it useless for any other purpose. And he says—"Probably all the money in former times was of this kind : for they used iron skewers as money, and some used copper ones. Whence it comes that even now a quantity of small coin is called *obolus*, and a *drachma* is six *oboli*, because the hand can grasp that number." We shall see below that Pheidon, who introduced a silver coinage into Greece, collected a number of these nails or skewers, and laid them up in the Temple of Here at Argos as a curiosity

Although Julius Pollux says that the invention of coining was by different writers attributed to four different persons, of peoples, the claimants for this honor are practically but two—Pheidon of Argos and the Lydians. The majority of ancient writers attribute it to Pheidon, king of Argos. The historian Ephorus is quoted in two places by Strabo. In viii., 6, he says—

"Ἐφορος, ἐν Αἰγίῃ ἄργυρον πρῶτον κοπήναι φησιν ὑπὸ Φειδῶνος. Ἐμπορείον γὰρ γενέσθαι παρὰ τὴν λυπρότητα τῆς χώρας τὴν ἀνθρώπων θαλαττοϋργούντων ἐμπορικῶς"

"Ephorus says that silver was first coined in Ægina by Pheidon. For the island became a commercial port, as the inhabitants were obliged to betake themselves to maritime commerce in consequence of the sterility of the land"

Also in viii., 3—

"Καὶ μέτρα ἐξέυρε τὰ Φειδώνεια καλούμενα, καὶ σταθμοὺς, καὶ νόμισμα κεχαραγμένον τό τε ἄλλο καὶ τὸ ἄργυρον"

"And he invented the measures, called the Pheidonian ones, and weights, and coined Money of silver, and other kinds"

The *Etymologicum Magnum* under the title ὀβελίσκος says—

“ Πάντων δὲ πρώτος Φεῖδων Ἀργεῖος νόμισμα ἔκοψεν ἐν Αἰγίνῃ, καὶ δοὺς τὸ νόμισμα καὶ ἀναλάβων τοὺς ὀβελίσκους, ἀνέθηκε τῇ ἐν Ἀργεὶ Ἥρᾳ

*“ And Pheidon of Argos was the first who ever coined Money : which he did at Ægina : and he both put money into circulation, and withdrew the skewers, and laid them up in the temple of Here in Argos ”*

And in accordance with this, Ælian says<sup>1</sup>—

“ Καὶ πρῶτοι νόμισμα ἐκόψαντο, καὶ ἐξ αὐτῶν ἐκλήθη νόμισμα Αἰγιναῖον ”

*“ And they were the first who coined Money, which, too, from them is called Æginetan Money ”*

So the Parian marble says<sup>2</sup>—

“ Ἀφ, οὗ Φ . . . δων ὁ Ἀργεῖος ἐδήμευσ . . . . . ε . . . . . νεσκεῖσσε, καὶ νόμισμα ἀργυροῦν ἐν Αἰγίνῃ ἐποίησεν ”

All these authorities, therefore, are perfectly clear that Pheidon of Argos was the first who coined Money, which he did at Ægina : because it was a great commercial port : and, therefore, it was most wanted there for the convenience of commerce

The period at which Pheidon lived has been the subject of much dispute. For while some carry it back so far as 865 B.C. others bring it down to 783—744. The question is fully discussed in the first Appendix to the first Volume of Mr. Clinton's *Fastæ Hellenicæ* : and in his opinion, the latter is the true date. We may, therefore, place the invention of coining by Pheidon in the first half of the 8th century B.C. At that time he was by far the most powerful sovereign in Greece. Argos was the metropolis not only of the Peloponnesian Dorians but of the Asiatic Dorian colonies. The Dorians carried on a very large commerce with the Phenicians, and Pheidon adopted his system of weights from them. From time immemorial there had been two standard weights used in Assyria, the Babylonian and the Euboic talent. The Dorians traded with the Phenicians

<sup>1</sup> *Var. Hist.* XII., 10. *De Æginetis*

<sup>2</sup> *Clinton's Fast. Hellen.* I., 247

and adopted the Babylonian talent. The Ionic Greeks adopted the Euboic talent. As Ægina was the great commercial depôt, this talent was afterwards called the Æginean talent. The Assyrians at this period had no coinage. Pheidon introducing the system of Babylonian weights into Greece, seems to have invented a system of measures which were called after him, and also a silver coinage, to supersede the clumsy iron and copper nails, or skewers, then used as Money

The account of the invention of coinage just given seems to be natural and probable. There is, however, a passage in Herodotus which seems to be at variance with it. He says, I., 94, speaking of the Lydians—

“*Πρῶτοι δὲ ἀνθρώπων τῶν ἡμεῖς ἴδμεν νόμισμα χρυσοῦ καὶ ἀργύρου κοινάμενοι ἐχρήσαντο*”

“*And they were the first men we know of who coined and used gold and silver money*”

This has always been supposed to mean that the Lydians were the first who invented coining, and that they used a double standard, as it is called, of gold coins and silver coins. If this be the case, the authority of Herodotus is against the claim of Pheidon: and though it is somewhat singular, that Julius Pollux does not mention this passage, he says that Xenophanes of Colophon assigns the invention to the Lydians

However, the commentators have not rightly apprehended the meaning of Herodotus. They make him say that the Lydians coined gold coins and silver coins separately. But when *καὶ* is used to connect two qualities, it means that the thing spoken of partakes of both these qualities at once. Thus, as the month began in the middle of a day, the last day of a month was called *ἐνὶ καὶ νέα*, the new-and-old day, because it belonged partly to one month and partly to another. So there are many other examples. This passage, therefore, does not mean that the Lydians were the first to coin gold money and silver money separately—if Herodotus had meant that he would have said *νόμισμα χρυσοῦ τε καὶ ἀργύρου*—but it means that the Lydians were the first to coin money of a **mixture of gold and silver**

Now we find that this rendering of the passage, which is the

genuine Greek Idiom, exactly tallies with the fact. The Lydians had a coinage of a mixture of gold and silver which they called *ἤλεκτρον*, or *electrum*. They were usually made of three parts of gold and one of silver. And these coins were adopted throughout the western states of Asia Minor. There are several of these coins in the British Museum

It may almost seem superfluous to remark that this stamp, or certificate, in no way affects the Value of the Coin: or the Quantity of things it will exchange for, or purchase. Its only object is to save the trouble of weighing and assaying the bullion in commercial transactions. Nor can the **Name** of a coin in any way affect its **Value**. Values, it is true, are estimated in the number of these pieces of Bullion, or Coins: but it is necessarily implied in the bargain that the Coins shall contain a certain quantity of Bullion of a definite fineness

Nevertheless, although this seems so perfectly clear, it is a confusion on this point which is at the root of most of the extravagances on the Currency question, which have so long vexed the public ear. They almost all arise from confounding the **Name**, or **Denomination** of a Coin with its **Value**: its Name with its Purchasing Power: and from supposing that if the Legislature chose to call a Shilling a Pound, that therefore a shilling would have the Value of a pound. Any one who will brand on his mind the simple principle, that although the stamp gives the Coin currency, it is the weight of bullion alone which gives it Value, will be able to steer his course safely through all the shoals and quicksands of monetary controversies

We shall see a little further on that calling the reader's attention to these self-evident truths is not so superfluous as it may appear at present

It is also evident that if this process of stamping bullion, and so turning it into coin, is done free of all expense, at the will of any one who chooses to present Bullion and demand to have it stamped: and also without any delay: the Value of the metal as Bullion must be exactly the same as the Value of the metal as Coin

If however a charge is made for the workmanship: or if any



tax is levied on changing the metal from one form into the other : or if a delay takes place in doing so : there will be a difference between the Value of the metal as Bullion and as Coin : equal to the charge for workmanship, the tax imposed, and the amount of interest accruing during the period of delay

These however are all fixed or constant quantities : which can be ascertained : and they form the limits of the variation of the Value of the metal in Bullion and in Coin

In the following remarks we shall assume that there is no charge for workmanship, no tax, and no delay in doing it, no obstruction in short in changing the metal from one form into the other

Upon these assumptions then, and only upon these, we have this fundamental law of the Coinage—

*Any Quantity of Metal in the form of Bullion must be of exactly the same Value as the same Quantity of Metal in the form of Coin*

In the case of the Coinage of England no charge of any sort is made for coining gold Bullion : but as considerable delay may take place before any one who brings Bullion to the Mint can have it coined : the 7 & 8 Vict. (1844) c. 32, s. 4, enacts that every person may take standard Bullion to the Bank of England, and that the Bank shall be obliged to purchase his Bullion in Notes to the amount of £3 17s. 9d. for every ounce of such Bullion. And as the holder of such Notes may immediately demand legal Coin for them at the rate of £3 17s. 10½d. per ounce, it may be said that every one can instantly convert his Bullion into Coin at the cost of 1½d. per ounce .

### *What is a Pound ?*

2. In the great Currency debates during the great war, many curious notions were started as to what a "Pound" is. Sir Robert Peel once asked the question—"What is a Pound ?"—and, he found a good many persons who could give him no

answer. We have now to explain how a certain weight of Gold Bullion has come to be called a **Pound**

The original Measure of Value, instituted by Charlemagne, in all the countries of Western Europe—France, England, Italy, Spain, Scotland—was the Pound weight of Silver Bullion

No coin of this actual weight was ever struck : but the Pound weight was divided into 240 coins, called *Denarii* or Pennies : twelve of these Pennies were termed a Solidus or shilling : and therefore 20 Shillings or *Solidi*, actually weighed a Pound of Silver Bullion

Now let us denote the Pound weight of metal in the form of Bullion by the symbol—lb. : and the Pound weight of metal in the form of coin by the symbol—£ : then we have—

$$240 \text{ Pennies} = 20 \text{ Shillings} = \text{£}1 = 1 \text{ lb.}$$

Now if the Pound weight of metal were divided into more than 240 Pennies, it is clear that the greater number of Pennies would still be equal to the Pound in weight : and if we denoted 240 pennies by the symbol—£, irrespective of their weight, we should have the — lb. = £1 + the number of pennies above 240.

This is what has been done in the coinage of all the countries above-mentioned. The sovereigns of these countries were frequently in want of money to pursue their various extravagances. As they could not increase the quantity of the metal, they adopted the fraudulent plan of surreptitiously cutting the Pound weight of Bullion into a greater number of pennies. But they still called them by the same name. By this means they gained an illusory augmentation of wealth. As they could not increase the quantity of the metal, they, at various periods, *falsified the certificate* : while they still called the coins by the same name

The consequence of this was manifest. As 240 pennies were still called a Pound in money—or £—whatever their weight was : and as more than 240 pennies were coined out of the Pound weight of Bullion—or lb.—the £, or Pound of metal in Coin began to vary from the lb., or Pound of metal in Bullion

Edward I. began this bad practice in 1300 : he coined 243 pennies out of the Pound weight of metal : in 1366 Edward III.

coined 266 pennies out of the Pound of Bullion : in 1412 Henry IV. coined the Pound into 360 pennies : and so it gradually crept up until Elizabeth in 1601 coined the Pound weight of Bullion into 744 pennies : at which it remained till 1816

Then we have manifestly—

$$744 \text{ pennies} = 62 \text{ shillings} = \text{£}3 \text{ 2s.} = 1 \text{ lb.}$$

As there are 12 ounces in one Pound weight of Bullion, it is evident that each ounce was coined into 62 pennies : and as the value of Bullion is measured by the ounce, the Mint Price of Silver was said to be 5s. 2d. per ounce

In Scotland this depreciation of the Coinage began about the same period as in England, but it proceeded to much greater lengths. In 1306 Robert Bruce coined the Pound of Bullion into 252 pennies : in 1451 James II. coined it into 760 pennies, or £3 4s. : and the depreciation was continued, until at last in 1738 the Pound of Bullion was coined into 8,928 pennies, or £37 4s. : and thus the Pound Scots became equal to twenty pence

In France and Italy the depreciation proceeded twice as far as in Scotland. The French *Livre* and the Italian *Lira* were at last reduced to 10¢. The French *Livre*, which is now called a *franc*, has been adopted as the basis of the decimal system of coinage : and the *solulus* has now dwindled down to the *sou*, or halfpenny

At the great recoinage in 1816 it was determined to adopt the principles of Locke and Lord Liverpool, and make Gold as the single standard of England : and the Sovereign, or Pound in Gold, was coined to be equal to 20s. in Silver at the then market value of Gold and Silver

Ever since the time of Charles II. the coinage of gold has been free to the public. But by the Act of 1816, the coinage of Silver and Bronze is retained in the hands of the Government. In order to obviate the effects of what is termed Gresham's Law,

which will be described shortly, the value of the Silver Coinage has been artificially raised. Since 1816 the Pound weight of Silver has been coined into 66 shillings: but four of these are retained for the expenses of coinage: and the 62 lighter shillings are declared to be of the same value as the previous heavier ones. Thus, 20 of them are declared to be equal in value to the Sovereign, or Pound: and thus their value is, or rather was, artificially raised about 6 per cent. This, of course, refers to the relative value of Gold and Silver in 1816: at the present time the market value of the silver in a shilling is about 7d.: with every prospect of its going much lower. But to prevent injustice being done they are not legal tender for any sum above 40s.: it having been intended to make the double Sovereign the monetary unit

The bronze coins are only worth about one-fourth of their nominal value: pence and half-pence are only legal tender to the value of one shilling; and farthings to the value of sixpence

This country now enjoys the most admirable system of Coinage ever devised by the ingenuity of man: and as a proof of its excellence, while all the countries which attempted to make Gold and Silver equally legal tender to an unlimited amount when coined at a fixed ratio, were thrown into confusion and perturbation by the recent changes in the value of these metals, the Coinage of this country passed through the whole of the protracted crisis with the most perfect tranquility. He would be a bold and daring Minister indeed, who would undertake to disturb our present system of Coinage

### *Meaning of the Mint Price of Gold and Silver*

3. As the very purpose of coining is to certify that the pieces of Bullion are of a certain definite weight and fineness: it is evident that a fixed weight of Bullion must be divided into a fixed number of Coins

*The Number of Coins into which a given Quantity of Bullion*

*is divided by Law, is called the Mint Price of that Quantity of Bullion*

The Mint Price of Bullion is therefore simply the amount of Coin which is equal to any quantity of Bullion, weight for weight

By the Law at present in force, forty pounds weight of Standard Gold Bullion are divided into 1,869 coins called Sovereigns, or Pounds: hence one pound weight of Gold Bullion is coined into £46 14s. 6d.: or as the value of Gold is measured by the ounce: one ounce of Gold Bullion is coined into £3 17s. 10½d.: and this is termed the **Mint Price** of Gold

The legal weight of the Pound, or Sovereign, is 5 dwts. 3½ grs.: or 113½ grs. of pure gold. Sovereigns which fall below 5 dwts. 2½ grs.: and half sovereigns which fall below 2 dwts, 13½ grs., cease to be legal tender

In the time of William the Conqueror the pound weight of Silver Bullion was coined into 240 pennies. Hence the Mint Price of silver was £1 per pound: but in the time of Elizabeth the pound weight of silver was coined into 744 pennies: hence, as 240 pennies were still called a £, the Mint Price of Silver then became £3 2s. a pound: or 5s. 2d. an ounce

*To Alter the Mint Price of Bullion merely means an Alteration in the Legal Weight of the Coinage*

To suppose that the Mint Price of Bullion could vary is manifestly as great an error as to suppose that a hundredweight of sugar could be a different weight from 112 separate pounds weight of sugar: or that the quantity of wine in a hogshead could differ in quantity from the same quantity of wine in bottles: or that a loaf of bread could alter in its weight by being cut up into slices

*It is not an Economic Error to Fix the Mint Price of Bullion*

4. We must now say a word as to an error which is by no means infrequent. It is now acknowledged that it is a great

Economic error to fix the Price of any articles. It used formerly to be the custom to fix wages, and the price of various commodities: but all such attempts have long been abandoned as futile and mischievous. It is sometimes contended that it is an equal error to **Fix** the **Mint Price** of Gold

But those who affirm this overlook a very important consideration. The word "Price" except in the single instance of "Mint Price," always denotes the quantity of the article which is used as a measure which is given for an article of a *different* nature. Thus we may say that the Price of a bushel of corn is 5s.: where the Silver, the substance in which the Price is expressed, is of a different nature from the corn

But in the expression "Mint Price" of Bullion it always means the Value of Bullion in Coin of the *same* metal. Thus the Mint Price of Gold Bullion means its weight in Gold Coin: the Mint Price of Silver Bullion means its weight in Silver Coin.

Hence by the very definition, the Mint Price of Gold and Silver Bullion merely means the identical quantity or weight of Gold or Silver Bullion: and by the very nature of things the Mint Price of Bullion is a fixed quantity. If the Law requires an ounce of gold to be coined into £3 17s. 10½d., that amount of coin must be same value as an ounce of gold, no matter, whether gold becomes as plentiful as iron, or as scarce as diamonds: for that quantity of Coin is always exactly equal to an ounce of Bullion: whatever be the abundance or the scarcity of Bullion.

The value of gold may vary with respect to other things: it may purchase more or less bread, or wine, or meat, at one time than another: but it is absolutely impossible that an ounce weight of gold in the form of Coin can differ from an ounce weight of gold in the form of Bullion. To suppose that it could, would be as irrational as to suppose that because bread became very abundant or very scarce, a loaf of bread could differ from itself in weight when cut up into slices: or that a cask of wine could differ from itself when drawn off into bottles

The Mint Price of Gold, then, is nothing more than a public declaration of the weight of metal the Law requires to be in the Coin. An alteration in the Mint Price of Bullion means an alteration of the standard weight of the Coin: and would be the

same thing in principle as an alteration in the standard yard measure. Those who ridicule the idea of having the Mint Price of Gold fixed should, to be consistent, ridicule the idea of having the standard yard measure fixed

### *Meaning of the Market Price of Gold and Silver*

5. The Mint Price of Bullion is, as we have seen, merely the number of Coins into which a certain quantity of Bullion is divided: consequently, so long as the coins contain their full legal weight of metal, they are always of the value of that quantity of Bullion

But when Coins have been some time in circulation they must necessarily lose some of their weight from the wear and tear of daily use, even if they be not subjected to any bad practices such as clipping, which used to be done to a great extent formerly in this country

But these Coins may circulate for a considerable time in a country, and lose a good deal of their weight without losing their value. People are so accustomed to the sight of a particular coin, that unless they be money-dealers, they do not stop to inquire too curiously whether it is of the proper weight or not. In fact, when coins have been some time in use few persons know what their legal weight is. Many for instance do not associate the idea of a pound with any particular weight of bullion: and thus in exchange for products and services, coins may pass at their nominal value long after they have lost much of their legal weight

As Posthumus says in *Cymbeline*—

“’Tween man and man they weight not every stamp,  
Though light, take pieces for the figure’s sake”

But when Coins are given in exchange for Bullion the case is different. The value of Bullion is measured weight for weight with Coins. Consequently, if the Coins have lost their legal weight, a greater number of them must be given to purchase a given amount of Bullion than if they were full weight. Thus,

if the Mint Price of Silver were 5*s.* 2*d.* per ounce, that quantity of Coin ought by law to weigh an ounce : but if the Coins have lost their legal weight, it is clear that *more* than 5*s.* 2*d.* must be given to buy an ounce of Bullion.' It might, perhaps, take 6*s.* of the current Coin, or even more, to buy an ounce of Bullion

The quantity of Coin at its full legal weight, which is equal in weight to a given weight of Bullion, is called its Mint Price : but the quantity of the **Current** Coin, which is actually equal to it in weight, is called its Market Price : and as, if the current Coins have lost their weight, *more* of them must be given than if they are of the full legal weight, the Market Price will apparently be higher than the Mint Price : and this is called a **Rise of the Market Price above the Mint Price**

Suppose that the Mint Price of Silver is 5*s.* 2*d.* per ounce : and the Market Price is 6*s.* per ounce : that means that 6*s.* of the current Coin weigh no more than 5*s.* 2*d.* ought to do : and therefore the current coinage is deficient about  $\frac{1}{4}$  of its legal weight. Thus it is clear that the rise of the Market Price is due to the Depreciation of the Coinage

Hence we obtain this fundamental Law of the Coinage—

*When the Market Price of Bullion rises above the Mint Price, the Excess is the Proof and the Measure of the Depreciation of the Coinage*

In fact the apparent rise of the Market Price of Bullion is due to exactly the same cause as has made the Mint Price of Silver apparently rise from £1 in the days of William the Conqueror to £3 2*s.* at the present day. It is merely that the weight of the current coins has been diminished

The Market Price of Bullion could never fall below the Mint Price, unless there were more Bullion in the Coin than there ought to be by Law. And in such a case if it could be imagined to happen, the difference of the Market Price below the Mint Price would indicate the *excess* of the Coins above their legal weight



*On the Distinction between Diminution in Value and Depreciation*

6. We must now observe the distinction between two expressions which, though often used indiscriminately, are essentially different—namely, **Diminution in Value** and **Depreciation**

An **Alteration in Value** of any commodity means that any Quantity of it which was considered equal in Value to any Quantity of another commodity has undergone a change. If corn is at any time worth 40*s.* a quarter, and at another time is worth only 30*s.*, a quarter, those two Quantities have undergone an Alteration in Value

**Depreciation** means that it is not really of the Quality it professes to be

Alteration in Value always refers to some *other* commodity with which it is compared. Depreciation is used in reference to *itself*. Hence alteration in Value refers to External Quantity: Depreciation to Internal Quality—which however may affect its external relations

If at any time an ounce of Gold will exchange for fifteen ounces of Silver: and if in consequence of an increase in the quantity of Silver, an ounce of Gold becomes able to purchase twenty ounces of Silver, then Silver is said to have *fallen in Value* with respect to Gold: the Quality of the Silver remaining exactly the same. Or if while the quantity of Silver remained the same, Gold became so scarce that an ounce of Gold would similarly purchase twenty ounces of Silver, Gold would be said to have *risen in Value* with respect to Silver. In either case the result is the same: there is an Alteration in Value, or a change in the Exchangeable relation of the two metals: while each continues exactly of the same Quality

But if a piece of Money, as a Sovereign, which ought by law to contain a certain amount of pure Gold, does not contain the amount it ought to: or if a Shilling which ought to contain a certain amount of pure Silver, does not contain the amount it ought to: it is **Depreciated**: so also if a Bank Note which professes to be of the Value of five Sovereigns will only purchase four Sovereigns: it is **Depreciated**

These distinctions are of great importance though they are often overlooked. They are especially necessary to be observed in all discussions regarding the Value of Coins which retain the same name through a long series of ages. The Pound of Money in the days of William I. really meant a Pound weight of Silver Bullion : and silver was the only Money. Since then silver has greatly increased in quantity : and other things such as Gold, Copper, and Credit are used as Money as well : which have greatly tended to diminish the value of silver. It is said that Silver has fallen to the twelfth part of its value in those times. But, not only has the Value of Silver greatly **Diminished** : but also the Coinage has been greatly **Depreciated**. The Shilling was then the 20th part of a pound of Silver Bullion : it is now only the 66th part. Hence not only is Silver greatly *Diminished in Value*, but the Coinage is also greatly *Depreciated* : and it is said that, in consequence of these combined causes, the modern shilling is only of the 36th part of the value it was in the time of William I.

These causes affecting the value of coins which retain their names through long periods, may act in the same, or in opposite directions. In the coinage of England, these two causes have acted in the same direction. But they may also act in opposite directions. A coinage may be greatly *Depreciated*, *i.e.*, reduced in weight, but from the increased value of the material, it may retain its former value, or may be able to purchase as much as it did in its original state. It is sometimes alleged that this happened at Rome. The first coinage of Rome was of copper : and the metal was found in great abundance for a considerable time after the foundation of the city. The first measure of value was the *as*, which was a pound weight of copper. The *as* was subsequently, about the time of the second Punic War, reduced to the twelfth part of its weight. And some writers allege that, in consequence of the great scarcity of the metal, it had increased in value so much that the depreciated coinage would purchase as much as the full pound of copper would originally. This may have been so, or not : but it in no way affects the argument : it may very possibly have been so

This is necessary to be observed in comparing prices at the present day with those of former times: it is necessary to compare the state of the coinage at the two periods

These considerations greatly affect the public in the matter of public Debts. The State agrees at a particular time to pay a fixed quantity of Bullion for ever, or for a long period of time, to its Creditors. Now even supposing that all other things remain the same, the Value of the Money may vary greatly during long periods of time, either from the increased scarcity or the increased abundance of the metal: and either the State or its Creditors may be grievously affected by these changes

The Public Debt of England has not been sufficiently long in existence to be much affected by this last consideration: but it has been very sensibly felt in perpetual leases granted by Corporations several centuries ago to their tenants. In many cases Rents were fixed in the Money of the period, and in consequence of the diminution in value of Money and the Depreciation of the Coinage, since that time: the Rents have fallen to little more than a nominal amount at the present time. In other cases the Rents were reserved payable in the value of certain quantities of corn: and the far-seeing lessors who did this have preserved their Rents at a much higher value

*If a Change takes place in the Relative Value of Gold and Silver Coins: to determine whether it is due to an Alteration in Value of the two Metals, or to a Depreciation of the Coinage*

7. The considerations we have presented will enable us to solve a question of great practical importance. When both metals were used concurrently as Money, the Value of the Silver Coinage used to change with respect to the Gold. Thus Guineas were originally coined to be of the value of 20s. in silver: but in the reign of William III., guineas rose to 28s. and 30s.: and at the same time Silver Bullion rose from 5s. 2d. to 7s. an ounce.

One party stoutly maintained that this was due to the scarcity of silver. This assertion was absurd on the face of it: because if silver had become very scarce as compared to gold, it is quite clear that silver would have *risen* as compared to gold, and not

*fallen*. That is, instead of guineas being worth 28s., they would have been worth 15s. or 10s. From the figures above, this assertion was self-contradictory : because as compared with gold silver had apparently *fallen* in value ; and as compared with silver it had apparently *risen* in value

But as the variation might proceed either from a *Diminution in Value* of Silver as compared to Gold : or from a *Depreciation* of the Silver Coinage : we are enabled to devise a test which will enable us to decide to which of these causes it was due

It is quite clear that a Diminution in the Value of the Coin cannot produce any difference between the Mint Price and the Market Price of bullion : because by the very meaning of the term Mint Price however plentiful or however scarce Silver may be, an ounce of it in Coin must always be of the exact weight or value of an ounce of it in Bullion

On the other hand, a Depreciation of the Coinage must inevitably produce a rise in the Market Price of Bullion above the Mint Price : because, however, plentiful or scarce Bullion may be, three quarters of an ounce of it in Coin can never be equal in weight or value to an ounce of it in Bullion

The case may be shortly stated thus—Guineas may rise to 30s. in silver, either from a Diminution in Value of Silver : or from a Depreciation of the Silver Coinage. What is the test ? It is to be found in the Market Price of Silver. If the Silver Coinage is depreciated the Market Price will rise above the Mint Price : if it is a mere Alteration in the Value of Silver it will not

Evidently, however, both circumstances may take place. There may be an Alteration in the Value of the metals as well as a Depreciation of the Silver Coinage at the same time. And it is quite easy to devise a test in such a case. Because the Depreciation of the Silver Coinage is measured by the rise of Market Price above the Mint Price of Silver : and thus the Value of the Silver Coinage being rectified, it is quite easy to see whether it has changed in its relation to Gold

### *On Gresham's Law of the Coinage*

8. We have now to notice a Law of fundamental importance in the Theory of the Coinage

Aristophanes first noticed the fact at Athens, that when a debased Coinage was issued along with a good Coinage, the good Coins all disappeared from circulation, and the debased ones alone remained

Aristophanes says<sup>1</sup>—"The State has very often appeared to us to be placed in the same position towards the good and noble citizens as it is with regard to the ancient coinage and the new gold: for we make no use either at home or abroad of those which are not adulterated, but the most beautiful of all money, as it would seem, which are alone well coined and ring properly, but of this base copper struck only yesterday, and of a most vile stamp." This law, first noticed by Aristophanes, has been found to be true in all ages and countries

This fact was long the puzzle of financiers and statesmen. As will be shown further on, the Coinage of this country used formerly to suffer very much from clipping and other bad practices. Repeated attempts were made to remedy the evil by issuing new Coin from the Mint, without withdrawing the degraded coin. But all these efforts failed: the good coins invariably disappeared from circulation, and the bad ones alone remained

At length Sir Thomas Gresham first explained to Queen Elizabeth that allowing the degraded Coin to remain in circulation was the **Cause** of the disappearance of the good Coin: and therefore, we called it "Gresham's Law of the Coinage": which name is now universally accepted

This Law was well expressed in an old pamphlet thus<sup>2</sup>—

*"When two sorts of Money are current in the same nation, of like Value by Denomination, but not Intrinsically [i.e., not in Market Value], that which has the least Value will be current, and the other as much as possible hoarded"* or exported

Which may be expressed shortly thus—

*"Bad Money always drives good Money out from circulation."*

<sup>1</sup> *Ramæ*, 718

<sup>2</sup> *A Reply to the Defence of the Bank, setting forth the unreasonableness of their slow payments.* London, 1696

This Law which is absolutely universal applies in the following cases—

1. If only one metal be used as Money, and degraded and debased coins of that metal be allowed to circulate along with good ones: the good coins will disappear and the bad coins alone will remain in circulation

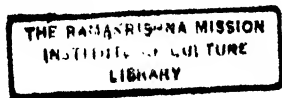
2. If coins of two metals are issued and tied together by a legal ratio: if the legal ratio of the Coins differ from the market value of the metals: the coins which are *underrated* will *disappear*: and the coins which are *overrated* will alone remain in circulation

3. And as a consequence of the same Law it is impossible to maintain a fixed Par Exchange between countries which use different metals as their standard

The reason is plain. If full weighted and depreciated coins are allowed to circulate together, one of two effects must necessarily follow. Either those persons who have commodities to sell will make a difference in their nominal price, according as they are paid in good or depreciated coin: that is, the light coin will be at a discount as compared with the good coin: or if there be a law to prevent this, and to make both pass at the same nominal value, every one will try to pay his debt at the least possible expense. He will always pay his debt in light coin, and hoard away the good coin

As values are always by the weight of the metal, a law which declares that light coin shall be of the same value as good coin is as great an anomaly as a law which declared that three are equal to four. But the consequence is very plain: if the law declares that three ounces of bullion are equal in value to four ounces, persons will, of course, pay their debts in the light coin: and bullion dealers will collect all the full weighted coin and export it to foreign countries where it is allowed to bear its market value. Thus the good coin quickly disappears from circulation, and the light coin alone remains

Moreover, no one will bring Bullion to the Mint to be converted into Coin. No one will bring four ounces to the Mint if it will have no greater value than three ounces when coined.



5 5.62

During the degraded state of the silver coinage during the last century, the Market Price of silver always exceeded the Mint Price. Smith says that the Market Price of silver ranged from 5s. 4d. to 5s. 8d. an ounce before the recoinage in 1774. And the second Report of the Lords' Committee of Secrecy in 1797 says—"But as the Mint Price of Silver Bullion has been during the whole of the present century considerably less than the Market Price of the precious metal, *the Silver Bullion imported could not be converted into Coin*: but having left a sufficient quantity for the use of our manufacturers, must have been again exported, and did not contribute in the smallest degree to augment the Coin of this kingdom."

The very same principle holds true even if the coin of both metals is full weighted, if the law attempts to fix a ratio between them which differs from the market rate of the world.

We shall presently see the application of these principles

### *On a Decimal Coinage*

9. We have now to consider a question which has excited considerable discussion in recent times, and is constantly brought forward by Chambers of Commerce, viz., whether it is practicable and expedient to decimalize the Coinage of England.

The great monetary reforms which have taken place on the Continent in recent years, and the immense benefits which have followed the unification of the coinages of France, Italy, Belgium, Switzerland and Germany have naturally led many persons of great scientific acquirements to advocate the adoption of a Decimal System of Coinage for England: and the assimilation of the Coinage of this country to that of the great extent of Europe which has adopted the French system. We have now to consider whether such a system can be introduced into this country, and whether there is a reasonable prospect of a uniform system of coinage being adopted by all nations.

A Decimal Coinage is one consisting of pieces related to each other in the ratio of 10, or some power of 10.

There are three distinct systems of Coinage—

1stly. Where the lowest coin of all, or even an imaginary unit below any existing coin is taken, and all other coins are multiples of that unit. That is where the Coinage proceeds exclusively by multiplication

2ndly. Where some intermediate coin is taken as the unit : and other coins are struck both as multiples and subdivisions of the unit. That is where the coinage is a combination of multiplication and subdivision

3rdly. Where the highest coin of all is taken as the unit. That is where the Coinage proceeds exclusively by subdivision

In the first system it is natural that all accounts should proceed by decimal multiples of the unit. And, therefore, there may be decimal accounts. But that does not necessarily imply a Decimal Coinage. Thus from time immemorial the only coin in China has been the *cash*, which is the 1,000th part of an ounce of silver. This is the only coin in existence, and all sums are expressed as decimal multiples of that unit. This is attended with very great convenience, and calculations are very quickly performed, and travellers tell us of the expertness with which mere children can perform long calculations. But the Chinese have not a Decimal Coinage, as there are no multiples of the cash.

The French and American Coinages are examples of the second system. In France the franc is the unit, and in America the dollar : and there are both multiples and subdivisions of the franc and the dollar. The napoleon is equal to 20 francs, and there are divisions of the franc according to a decimal system. The Coinage is decimal so far as the franc, but not further : as the napoleon is not decimally related to the franc. The dollar has both decimal multiples and subdivisions

The English Coinage is an example of the third system. The unit is the pound sterling, now a gold coin. And all other coins are aliquot parts of the pound sterling. The English Coinage, therefore, proceeds exclusively by subdivision

Now the decimal system of accounts having been applied with great success in the first system : and a decimal system of



accounts and coins having been adopted with more or less success in the second system : a pretty strong feeling has been excited, especially among scientific and commercial men, to decimalize the English Coinage. That is, to make the different pieces of the Coinage related to each other in a decimal ratio

At first sight such a scheme appears to have many advantages. It is much easier to cast up accounts decimally than by our present plan. And it seems a very plausible thing to say that as the integers proceed on the denary scale, so should the subdivisions. That is, if it be multiplied decimally, why should it not be divided decimally ?

This idea, however plausible, is utterly erroneous. It is founded on the idea that integers expressed in the denary scale and decimal fractions are correlative systems. People see that figures on one side of the Decimal point increase by powers of 10 : and on the other side decrease by powers of 10 : and they jump at the conclusion that they proceed on the same principles. Nevertheless, this is an entire fallacy, and it is quite easy to show it. Thus, if we multiply 1 by 3 we have 3 : an exact answer : but if we divide 1 by 3 do we have  $\cdot 3$ —an exact answer ? If we multiply 1 by 2, we have 2 : but if we divide 1 by 2 decimally, we do not have  $\cdot 2$  but  $\cdot 5$  : which shows at once that decimal fractions are different in principle from multiplication of integers.

To show this more clearly, we may multiply an integer by any number we please, and always obtain an exact result, which for the purposes of convenience we may reckon by groups of 10

So we may divide an integer by 2, 3, 4, 5, &c., or any number, and obtain an exact result. Hence division by the ordinary numbers is the correlative of multiplication by them. Therefore the common fractions are the correlatives of ordinary multiplication in the denary scale

But in decimals it is not so, for these the only divisors are 10 and powers of 10. Hence while we may multiply by any number whatever, we must only divide by powers of 10. Instead of our divisors being unlimited, they are restricted to a very small number indeed. And this consequence follows, that it is physically

impossible to divide a unit exactly into aliquot parts which are not some powers of the factors of 10

That is, a unit cannot be divided exactly in decimals by any number which is not of the form of  $2^n \times 5^m$

Now the immense majority of numbers are not of this form at all : and consequently it is physically impossible to divide a unit exactly by the immense majority of numbers in decimals

To show how very few there are, the only natural numbers up to 1,000 by which a unit can be exactly divided are—

Taking powers of 2 we have—

1, 2, 4, 8, 16, 32, 64, 128, 256, 512

Taking powers of 5 we have—

1, 5, 25, 125, 625

Now a unit cannot be divided exactly in decimals by any number except those in these two series, or those arising from a multiplication of any one in one series by any one in the other

Now there are only 28 numbers up to 1,000 by which exact division is possible. They are 2, 4, 5, 8, 10, 16, 20, 25, 32, 40, 50, 64, 80, 100, 125, 128, 160, 200, 250, 256, 320, 400, 500, 512, 625, 640, 800, and 1,000

Now, what should we say of a system of multiplication in which it was physically impossible to obtain an exact result in the immense majority of cases : only by 28 numbers up to 1,000 ? It is clear that such a system could not be tolerated for a day

Such a system as that would be the correlative of decimal fractions : it would be one in which we were forbidden to multiply by any numbers except 10 and powers of the factors of 10 : and, therefore, no multipliers which were not of the form  $2^n \times 5^m$  could bring out an exact number

Hence we see that the analogy between decimal numbers and decimal fractions entirely fails. In fact they proceed upon different principles : and it is manifestly the same with any fraction expressed in the radix of the scale of notation

It can only be divided by powers of the radix or of the factors of the radix. Consequently it can be divided exactly by no numbers which are not composed of powers of the factors of the radix

There is, therefore, a fundamental distinction between

multiplication in the denary scale and decimal subdivisions. For all cases of multiplication nothing can be better than decimals : for all cases of subdivision nothing can be worse

The cases, therefore, of a Coinage in which the unit is the lowest possible, and, therefore, proceeds by multiplication : and that of a Coinage in which the unit is the highest possible, and, therefore, proceeds entirely by subdivision, are not only not parallel, but they involve antagonistic principles

Hence the analogy between a Coinage of the third system and one of the first system entirely fails : what is best in the first is impracticable in the third

The essential peculiarity of decimal fractions is that the unit cannot be divided into any aliquot parts except those composed of powers of the factors of 10. This is a restriction which no people would ever submit to in the common affairs of life. We constantly require to divide things exactly into 3, 6, 7, 11, 12 parts. No one would ever dream of proposing that persons should voluntarily preclude themselves from dividing a quantity into any exact parts under 1,000, but those of the 28 numbers given above. But that is what we should do if we were to adopt decimal subdivisions exclusively. Such a notion is so monstrous, that no one out of Bedlam would propose it. It would be just as rational as to suppose that we should adopt a system of multiplication in which none but these figures should produce exact results

It would be the state of greatest perfection if we could imagine the unit of value, such as gold, to be some soft substance like putty, which we could sub-divide into any number of parts exactly. But as that is impossible, the next best thing is to have it divided into that number of pieces which contains the greatest numbers of divisions possible. Now 10 is not only not good but extremely bad

Considering that the present unit of the English coinage is gold, and its existing magnitude, it is quite easy to show, that no division of it is at all comparable to that of 20, 12, and 4. No

other combination within the same compass presents such a richness of factors. It has no less than 27 : namely, 2, 3, 4, 5, 6, 8, 10, 12, 15, 16, 20, 24, 30, 32, 40, 48, 60, 64, 80, 96, 120, 160, 192, 240, 320, 480, 960 : whereas 1,000 has only 14 factors—2, 4, 5, 8, 10, 20, 25, 40, 50, 100, 125, 200, 250, 500. Hence the immense superiority of the present division of the pound sterling over that of the millesimal one for all purposes of physical sub-division is manifest

Every one's daily experience shows that while he naturally uses the decimal scale for multiplication, he never thinks of confining himself to decimals for sub-division. People want every day halves, quarters, and half-quarters of things, and they call them so. But if we are to have decimal fractions exclusively, these expressions must be given up. A snuffy old woman in the Highlands wants half an ounce of snuff, she must no longer ask for that, but she must ask for  $\cdot 5$  of an ounce ; she wants a quarter of an ounce : she must no longer ask for that, but for  $\cdot 25$  of an ounce. And so on. A nation of savans might do that, but common humanity never will. We want half, or a quarter, of a thing. The eye performs the work instantaneously. But if we go to decimal fractions, we must first divide the unit into 10 or 100 parts, and then take 5 or 25 of these parts. Such a statement shows the manifest absurdity of such a thing

The whole confusion is based upon the idea that decimal fractions are analogous to decimal integers : which is a complete delusion : and if this distinction in principle had been fully considered, the question never would have been agitated at all, and the spasmodic attempts made to revive it, would be dropped

Considering these fundamental differences of principle between decimal integers and decimal fractions : and decimal multiplication and decimal division, the following may be stated as ascertained principles with respect to a coinage—

1stly. Where the unit of account is the lowest coin in use, and the whole coinage consists of multiples of that unit, the decimal system is by far the best

2ndly. Where the unit of account is a coin of some low magnitude, the decimal system will have great convenience, and some inconveniences. And as the unit becomes larger the inconveniences will constantly increase over the advantages

3rdly. Where the unit of account is the highest coin of all, the decimal system which is then one of exclusive sub-division, is an intolerable nuisance, which could never subsist for any time at all

It is, therefore, evident that it is practically impossible to adopt any system of Decimal Coinage in this country so long as the pound sterling is retained as the unit of account, and the coinage is one of pure sub-division. Other schemes have been proposed, based upon the penny and the farthing, of which we shall say something hereafter

It is unquestionable that for matters of account on paper, especially in large numbers, the decimal system affords an immense superiority. It is no doubt true that it is physically impossible to divide anything into 3, 6, 7, &c., exact parts by decimals. We can, however, carry it as near exactness as we please. The philosopher can afford to balance this inconvenience against the many other advantages, and carry his calculations a few figures further with equanimity, when he knows the ultimate result will come as nearly true as he pleases. But it is a far different matter with the daily transactions of life, where actual subdivision is required, and where the differences which arise from an imperfect division give rise to everlasting quarrels. No one who has not studied history can conceive the intolerable practical misery which a depreciated currency causes to a people :<sup>1</sup> and the very same effects are produced by an imperfect system of sub-divisions. We shall now give some historical notices of the adoption of the decimal system of coinage by different nations

### *On the Decimal System of Coinage of the United States*

The currency of the various American colonies was originally the same as that of the mother country. But we have shown elsewhere<sup>1</sup> that nearly all the States had issued enormous masses of paper money, the effect of which had been to depreciate the pound in them. The pound, too, had undergone different degrees of depreciation in the different States: hence there was at the time of the Revolution an immense confusion between the

<sup>1</sup> *Dictionary of Political Economy*

currencies of the different States. The weight of the pound sterling was 1,718 $\frac{3}{4}$  grains of pure silver : but the pound of Georgia was 1,547 grains : that of Virginia, Connecticut, Rhode Island, Massachusetts, and New Hampshire was 1,289 grains : that of Maryland, Delaware, Pennsylvania, and New Jersey was 1,031 $\frac{1}{4}$  grains : and that of North Carolina and New York was 966 $\frac{3}{4}$  grains

While, therefore, the pound, shilling, and penny had different values in different States, the Spanish dollar had a general circulation throughout all the States, but with a different rating. In the New England States and Virginia, it passed for 72 pence : in New York and North Carolina for 96 pence : in the Middle States for 90 pence : and in Georgia and South Carolina for 56 pence

When the Congress was formed they found it necessary to issue paper money to carry on the war. If this had been based upon the pound it would have caused intolerable confusion : besides there was no reason why the pound of any particular States should be preferred to the others. Congress, therefore, based their paper money on the dollar, which had a general currency throughout the States. And when the national independence was secured, the dollar was naturally adopted as the unit of the national currency in 1785

Mr. Robert Morris, the financier of the American Revolution, seems to have been the first who proposed a decimal coinage. He laid his plan before Congress in January, 1782. He proposed to have an exceeding small unit, and that the coins should be increased in a decimal ratio, to facilitate calculations. The unit was to be a quarter of a grain of pure silver. The lowest silver coin was to be 100 of these, and to be called a cent. To this 2 grains of copper were to be added. Five of these were to make a quint, and ten to make a mark. Mr. Jefferson, his successor, to whom the matter was referred in 1784, thought the unit was too small. In 1786 Congress adopted the plan proposed by Mr. Jefferson. The coins were an *eagle* of 246·268 grains of fine gold, to be equal to 10 dollars : a *half-eagle* of similar proportions : a *dollar* of 375·64 grains fine silver : *half-dollars* a double dime of 75·128 grains fine silver : *half-dimes* and *cents*

of copper, the 100th part of the dollar : and *half-cents*. Thus here we see the unit divided into halves

No action followed upon this plan. In 1790 it was referred to Mr. Alexander Hamilton, the Secretary, and he presented an elaborate report on it. He adopted the dollar as the unit, but contended that it should not be attached either to gold or silver exclusively. He proposed that it should correspond either to  $24\frac{3}{4}$  grains of fine gold, or  $371\frac{1}{2}$  grains of fine silver : each to pass for 1 dollar in account : the alloy of each to be  $\frac{1}{12}$ th : making the unit 27 grains of standard gold, and 405 grains of standard silver. An Act to establish a mint and regulate the coins in these proportions was passed in 1792 : but in 1837 the alloy both of gold and silver was ordered to be 1 part in 10 **5562**

The introduction of the decimal system into the American coinage was considered to be a great triumph of science : and its authors boasted that it had met with the highest approval of all eminent men in America and Europe. If therefore, it had been found in practice so very beneficial we should naturally have expected that during the period it has been in force, now just 100 years, it would have entirely superseded the former system of pounds, shillings and pence, and the binary division of halves, quarters and eighths. We should have expected that the existence of the former systems would only have been known to professed antiquaries, who would have looked upon it as geologists do the extinct races of animals. And as for the common people, they could never have been expected to have heard of it at all. But is this the fact in practice ? It is found not to be so. By law the dollar is divided into dimes, cents and mils. But it is found in practice that the cent being taken as the unit, while calculations upwards are reckoned decimally, those *downwards* invariably proceed on the old binary scale. While the law declares that there shall be no division of the cent except by 10, universal mercantile custom invariably proceeds by halves, quarters, eighths, &c. The mil is utterly ignored.

Thus Mr. Slater placed before the Decimal Coinage Commissioners, as an ordinary specimen of mercantile news, the following extract from a New Orleans Price Current.—“Louisiana

sugar, of fair quality, is quoted at 7 to  $7\frac{5}{8}$  cents per pound : (and also *exceptionally* among a multitude of quotations exhibiting binary subdivisions, at  $7\frac{8}{10}$  and  $8\frac{7}{10}$  cents) : green meat (pork) found purchasers at  $7\frac{1}{8}$  cents per lb. : and lard at  $9\frac{3}{8}$  to  $9\frac{5}{8}$  cents. On cotton the advance within the week has been fully  $\frac{3}{8}$  to  $\frac{1}{2}$  cent per lb. : whilst freight to Liverpool was taken at  $\frac{5}{16}$  to  $\frac{3}{8}$  cent this year, against  $\frac{1}{4}$  to  $\frac{1}{3}\frac{1}{2}$  in 1855 : and  $\frac{1}{6}$  to  $\frac{7}{8}$  in 1854. To Havre, cotton is taken on freight at  $\frac{5}{8}$  cent. A ship was taken for Bordeaux at  $\frac{1}{16}$  cent : and at Boston at  $\frac{7}{16}$  cent." No freights were quoted at decimal rates. Among the articles fluctuating in price by  $\frac{1}{4}$  cents, were found almonds, bacon, bagging, coffee, hides, lead, rice, soap, spirits

Thus taking this as a specimen of mercantile custom in America, we see that commercial instinct obstinately rejects the decimal division, notwithstanding that it is thrust upon them by law. And is it possible to conceive that they would not long ago have adopted it without any law at all if it had really been more suited for their purposes ? Just as some commercial establishments in this country have adopted decimals in their business, without any law at all ?

And no wonder : for the binary subdivisions are found to be those most convenient for commercial purposes. In decimals, 4ths could not be expressed in less than two figures : 8ths in less than three : 16ths in less than four : 32nds in less than five : and 64ths in less than six. Thus for instance in the above extract,  $\frac{5}{8} = .625$  :  $\frac{1}{16} = .0625$  :  $\frac{1}{3}\frac{1}{2} = .34375$ . What memory could stand such complexity ? In the first place, it would be necessary to remember that three figures in the quotation meant 8ths : four figures meant 16ths : and five figures meant 32nds : and then all the varieties of these fractions. This example shows that for physical subdivision decimals are intolerable

Commercial instinct therefore utterly condemns decimal subdivision. But does the common practice of small dealers in common life support it any better ? The evidence before the Commissioners equally disproved that notion. During all this period of 70 years it had been found impossible to extirpate the old reckoning by shillings and sixpences. Professor Kelland,



Dean of the University of Edinburgh, travelled extensively through the States, and gave in a most valuable paper to the Commissioners. When a nation adopts a decimal coinage, it would naturally be expected that they would adopt a decimal system of weights and measures. Indeed some of the witnesses seemed to think that there was very little use of one without the other. But the Americans have not decimalised their weights and measures: they still retain the old ones they learnt from the mother country. How is this, if decimalisation be so good? Still more should we expect that they would have made up their parcels in shops by tens instead of by dozens, to accommodate them to their money: but they have not decimalised their parcels. Professor Kelland says—"The decimal system has been the legal system in America for 60 years, and dozens have not yielded a hair's breadth as yet. The same paper from which I quote contains Valentines in lots of 144, 36, 24, 18, 12 and 3, but no tens." In a Cincinnati paper there were advertised for sale, 100 dozen jars, 100 dozen glass, 100 dozen cans. Shillings were the sums charged in Philadelphia, in the hotel bills. This appeared very strongly too, in the book catalogues. The prices though expressed in cents, were in reality accommodated to shillings. Some were marked 69 c., which, in reality meant 5s. 6d. New York: others 63 c., which meant 5s. New York: the New York shilling being  $12\frac{1}{2}$  cents. The New England shilling was  $16\frac{2}{3}$  cents. On examining 12 pages of the catalogue, decimal prices were marked in 40 cases, and non-decimals in 117. Among book prices 38 and 31 cents were most frequent, being remarkable numbers to choose if there were no particular reason for it. The fact was, the former number meant 3s. and the latter 2s. 6d. New York."

Nor was this opinion unsupported by intelligent natives. The Rev. Joshua Leawitt, editor of the *Independent* of New York, stated to the Committee of the Canadian Assembly in 1855—"I have no doubt of the superiority of the decimal system for the purposes of account: but for all purposes of small circulation, in marketing, huckstering, and the like, I am persuaded that a duodecimal currency, like that of England, or like that which formerly prevailed in the city of New York, is

far preferable. These small transactions of daily life outnumber the transactions of commerce almost infinitely, and it seems impossible to make a decimal currency as convenient in these as in the old currency. One reason is that the decimal currency admits of only one aliquot division, that is into halves." Mr. Leawitt then shows the excessive inconvenience of this want of divisible power. He said—"You are aware that in our New York marketing, and other small transactions, our business is still done in shillings and pence: the shilling being one-eighth of a dollar, and therefore corresponding exactly in its value to the old Spanish coin of one eight. The provincial currency of New York before the Revolution was framed upon the reckoning of 8s. to a dollar: and when the Federal currency was introduced in matters of coin, the common people still clung to the old shilling as a matter of necessary convenience in their pocket payments: and the experience of sixty years has not in the least diminished their attachment to this method of reckoning in small payments. . . . And not only this, but we find the people of all parts of the country are learning more and more to use the vernacular currency of New York in their daily chaffering from one end of the United States to the other. You will frequently hear people giving you the price of things in York shillings and York sixpences. I think this experiment is conclusive, and ought to be satisfactory to prove that the duodecimal currency in small transactions is a great public convenience. I am sure that is only this actual and felt convenience which has enabled it to maintain its ground for 60 years. . . . For myself, I have no idea that we shall ever abandon the shilling currency: the lapse of generations has only fixed it more firmly upon us, and I fully believe that in a few years we shall have a Congress so governed by common sense, and so alive to the convenience and welfare of the people, that they will legalise the York shilling and sixpence, as the eighth and sixteenth of a dollar, and will give us from our own mint a corresponding coinage." The Committee of the Legislative Assembly of Canada reported that coins representing the eighth and sixteenth of a dollar were indispensable in small transactions in Canada: these coins being quite incompatible with a decimal coinage

The introduction of a decimal system of coins into France was easier than almost any other nation. The French coins, like those of Western Europe, were divided into livres, or francs, sols and deniers. But the successive depreciations had brought the livre or franc down to below 10*d.*, the sol was in fact equal to  $\frac{1}{2}$ *d.*, and the denier had altogether ceased to be coined. The franc and the sol, therefore, were all that were wanted. It was only to call it 5 centimes instead of one sol, and the thing was done. Nevertheless, slight as this change was, it was effected with inconceivable slowness, if indeed it can be said to be done yet. The name of the livre was abolished, but that of franc retained. In order to make it weigh 5 grammes, it was found necessary to increase its weight by 1-80th part. Slight as this difference was, it gave rise to great disturbance. Dr. Gray says—"Even now, at the distance of half a century, it is by no means universally adopted in France, either in accounts, or still less in the great mass of ordinary retail dealings. As long as the old livres remained in circulation, whenever they were tendered in place of a franc, it became a constant source of contention which party was to be the loser by the bargain : one or the other must be so, as there was no coin to represent the actual difference, and the debate frequently ended in the weaker party giving two centimes or one fiftieth part instead of one eightieth part over and above the livre : or as a centime was a rarity seldom seen, a livre and a sol were combined to represent a franc, and thus the receiver obtained three and three quarters per cent. beyond the real value of the new coin as compared with the old." Dr. Gray says that even then accounts were frequently kept in livres, sols, and deniers, in the provinces and even in Paris itself the prices of most of the common and smaller articles were constantly expressed in *sous*. *Galvani's Messenger* was marked ten *sous*, not fifty centimes, or five decimes. In 1856 an ordonnance was issued to prevent people crying articles in the streets in *sous* ! So long do the old habits of the people on so small a matter continue against all the efforts of a powerful government

The French introduced their decimal system of moneys into Sardinia in 1793. The *lira* was diminished to an equality with

the franc : 100 old Piedmontese *lire* were coined into 118 $\frac{3}{4}$  new *lire* or francs. The Italian money is now entirely assimilated to the French, the coins of the two countries passing freely in each. This change was continued by the restored dynasty, after the overthrow of the French Empire. By laws of the 12th August and 7th September, 1816, and 4th and 9th December, 1820, the new *lira* was declared the money of account, and all contracts were ordered to be made in that coin. In 1827 this system was extended to the Duchy of Genoa, and in 1843 to the Island of Sardinia. And since the unification of Italy, the French system of coinage has been adopted throughout the country.

The French introduced the decimal system into Belgium in 1803. It was suppressed in 1816 in favor of the decimal system of the Netherlands : but the French system was restored in 1832. Before 1803 there were four distinct systems of coinage legalised and in common use : namely, the Flemish *livre*, containing twenty *schillings*, each *schilling* twelve *gros*, each *gros* eight *penninghens*, and each *penninghe* three *myten*. This money was chiefly used for calculating the foreign exchanges, especially that upon London, and was continued so late as 1843. The great commercial houses kept their accounts in *florins*, divided into 20 *sous*, and each *sol* into sixteen *deniers*. This was also used in the exchange on Amsterdam and Hamburg. The Brabant *florin*, containing 20 *sous*, and each *sol* twelve *deniers*, was the money used in daily life. And lastly the government accounts were kept in *livres tournois*, divided into twenty *sols* of France, and each *sol* into twelve *deniers*. It is not surprising that the establishment of a single uniform system like the French was found to be a great improvement over such complication. But even here the immense time necessary to change the habits of the people is seen. The higher commercial classes in the cities keep their accounts in francs and centimes, but the old divisions of Brabant *guilders* and *stivers* are still maintained by the small tradesmen and shopkeepers, though these coins have no monetary representatives. In common life every man in Belgium is compelled to have constantly at hand his tables of reduction of the various moneys, both past and present.

Up to 1848 the Swiss coinage was in a state of fearful confusion, each Canton coined money for itself which would not pass in the neighbouring ones. Numerous coins from France and Germany also passed current at different denominations. The Federal constitution of 1848 took away the power of the Cantons to coin money, and placed it in the hands of the Federal authorities, and demanded reform. In 1850 a new Federal law on coins was passed, which was brought into effect in 1851 and 1852. The moneys of account and usage were assimilated to the French, and all the old ones withdrawn and destroyed. What an enormous improvement this was may be judged by the answer of Mr. Trübner to the Decimal Coinage Commissioners, who says that before 1850 there were current "all kinds of German dollars, German florins, Austrian zwanzigers, French five-franc pieces, sub-divisions of the above, and about 160 different Swiss coins. The legal value of most coins was different in almost every canton: and the current value differed everywhere from the legal value!" Now the same coinage circulates throughout France, Belgium, Switzerland and Italy, to the immense relief of travelers

The late kingdom of the Two Sicilies had a coinage of which the ducat was the unit, divided into 10 *carlini*, and each *carlino* into ten grains, and each grain into 10 *calli*. But accounts were only kept in ducats and grains. Payments, however, were seldom made in ducats, which were a very rare coin, but in Neapolitan dollars, worth 12 *carlini*, or 120 grains. And here we have a curious example of a decimal system of accounts, with a duo-decimal coinage. For the coins in circulation were the dollar of 12 *carlini* or 120 grains: half-dollars of 6 *carlini*, or 60 grains: pieces of 4 *carlini*, 3 *carlini*, 2 *carlini*, 1 *carlino*, and half a *carlino*. Copper coins are in common use, of half a *carlino*, 4, 3, 2½, 2, 1½, 1, and ½ grain

This is a very strong and striking example of what we said above, that as soon as the unit of money becomes of any magnitude, the practical purposes of life irresistibly demand a duo-decimal coinage: as is also manifested in America

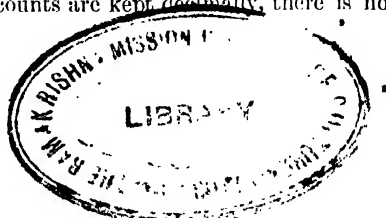
The Netherlands like most countries were afflicted with great

monetary confusion. The basis of the whole, however, was the florin containing 20 stivers, or 20 pence English. In 1821 this coin was taken as the unit of the system, and divided into cents and half-cents. In this case we observe the transition was extremely easy. The stiver was already the 20th part of the florin, and its name was simply changed into 5 cents, as in France. Hence, nothing was required to be done: it was simply to abolish a number of the old coins

Portugal is an example of a country having a single unit like that of China, and all the coins being multiples of that unit. The Portuguese unit is the rei, equal to  $\frac{4}{5}$  of a penny. The smallest coin is the 5 reis, equal to  $\frac{1}{5}$  of a penny. But though all the moneys of account were decimal multiples of the rei, the coinage was not so. The coinage consisted of moldores of 4800 reis: crusados, 400 reis; crusados novos, or pinto, 480 reis; quartitos, 1200 reis; testoons, 130 reis; and vintrenos, 20 reis. This coinage has now been abolished, and it has now been decimalised, as well as the accounts. The change came into operation in 1857

\* In Russia, the silver ruble is the standard, being about 38 pence. This is divided into 100 copecks, and the copeck is divided into halves and quarters. The silver ruble was established as the standard unit of money in 1840, in place of the ruble of assignation, to which the issues of depreciated paper had reduced the Russian standard. The silver ruble was equal to  $3\frac{1}{2}$  paper rubles, but the subdivisions of the latter were the same. And here we perceive that as soon it went below cents, the binary division was found necessary. The expenses, however, of the Crimean War forced Russia again to resort to Paper Money: and the present value of the Paper ruble is about 20*d.*: and of course the silver ruble is never seen

In Greece the drachma is the unit, being in value about 8*d.*: this is divided into 100 lepta, the latter being about  $\frac{1}{3}$  of a farthing. But although accounts are kept decimally, there is no decimal coinage.



Such are the examples of actually existing decimal systems both in accounts and coins : and they throw much light upon the question whether it is possible or expedient to decimalise the coinage of this country. We observe then that the highest unit in a decimal system of coinage is the American dollar, which is divided nominally into dimes, cents, and mills. But, practically, the only moneys of account are dollars and cents. The next highest was the Neapolitan ducat,  $41\frac{1}{2}d.$  divided nominally into 10ths, 100ths, and 1,000ths. But in practice the accounts were kept in ducats and grains only. The coinage was entirely duodecimal. The next is the Russian ruble of  $38d.$  both nominally and in practice, divided into 100 copecks : but the copeck is divided into halves and quarters.

Then comes the Netherlands, with its unit of  $20d.$  divided into cents, and these into half cents. Then the French, Swiss, Belgian, Italian and Spanish unit of  $10d.$ , nearly, divided nominally into decimes, centimes, and millièmes : but practically only into francs and cents. Here the centime is a coin so much below all ordinary use that there is no occasion for its division : and whether it is so in commercial transactions we are not aware. The Portuguese unit being purely imaginary does not require division. In all these we see that people refuse to go below cents in their accounts : so that we may fairly consider them as the pivots of the coinage : and whenever they go below cents in business, they reject the decimal division, and adopt a binary one. And this becomes clearer as the nominal unit becomes larger. We also observe that the large size of the American unit entirely prevents the use of decimals in business.

The question of decimalising the coinage and accounts of this country has been mooted at various periods. In 1816 a Royal Commission was appointed to consider the possibility of establishing a more uniform system of weights and measures. They reported that the existing subdivision of weights and measures was far more convenient for practical purposes than the decimal scale. In 1824 Sir John (afterwards Lord) Wrottesley brought forward a motion in the House of Commons for inquiring into the possibility of applying the decimal system to the coinage.

He proposed pounds, double shillings, and farthings reduced 4 per cent., in fact what is now known as the pound and mil scheme. The motion however was withdrawn and the currencies of England and Ireland were soon after assimilated. The standards of weight and measure were lost when the Houses of Parliament were burnt in 1834. In 1838 a Commission was appointed consisting of the Astronomer Royal (Mr. Airy), the President of the Royal Society (Mr. Francis Baily), Mr. J. E. Drinkwater Bethune, Sir J. W. F. Herschel, Sir J. G. Shaw Lefevre, Sir J. W. Lubbock, the Very Rev. George Peacock, Dean of Ely, Lowndean Professor of Astronomy, and the Rev. R. Sheepshanks, all men distinguished in science, but not one having any practical knowledge of commerce. The Commissioners reported in 1841 strongly recommending the decimalisation of the coinage on the system proposed by Sir John Wrottesley. In 1843 a second Commission was appointed, containing the names of the Astronomer Royal, Sir John Herschel, Sir J. G. S. Lefevre, Sir J. W. Lubbock, the Dean of Ely, and Mr. Sheepshanks, members of the former Commission : to whom were added the Marquis of Northampton, President of the Royal Society, the Earl of Rosse, Lord Wrottesley, and Professor Miller. The report of this Commission, composed like the former one exclusively of men of science, agreed with the former, and proposed to carry out its recommendations

In 1847 a motion was made by Sir John Bowring for an address to the Crown in favor of the coinage and issue of silver pieces of the value of 1-10th and 1-100th of the pound sterling, in order to introduce the decimal sub-divisions of the coinage. The motion was withdrawn, on the engagement of the Chancellor of the Exchequer that pieces of the value of the tenth of the pound should be coined. This was done, and these pieces called florins are now in common use

On the 26th March, 1853, the Commissioners of 1843 hearing that a coinage of copper was in contemplation, addressed a letter to Mr. Gladstone, then Chancellor of the Exchequer, urging that this copper coinage should be in pieces of the value of 1-1000th, 2-1000ths, and 4-1000ths of a pound, being 4 per cent. below the present penny, half-penny and farthing, with a view to the



introduction of the decimal system. On the 5th April, Mr. Gladstone was asked whether it was the intention of the Government to carry out the decimal system, by coining the new copper money on that scale. Mr. Gladstone replied that there was no intention on the part of the Government to make any change in the copper coinage. Nevertheless considering the great importance of the subject, they would support the motion for a Committee by one of the Members. Accordingly, on the 12th of April, on the motion of Mr. W. Brown, Member for South Lancashire, a Committee was appointed to consider and report upon the expediency, or otherwise, of adopting a decimal system of coinage.

This Committee examined twenty-five witnesses, all of whom were in favor of a decimal coinage, and recommended the pound and mil scheme, as the plan of the former Commission was called, with the exception of Mr. Headlam, M.P. for Newcastle, who strongly urged the expediency of making the  $\frac{1}{4}d.$  the basis of the coinage, and multiplying from that unit. This would make the pound sterling equal to £1 0s. 10*d.* The Committee made their report on the 1st of August, strongly recommending the adoption of the pound and mil scheme. They recommended the withdrawal of the half-crown, the 3*d.* and 4*d.* pieces, and the introduction of copper coins of 1, 2, and 4 mils, and silver coins of 10 and 20 mils.

The report of the Committee excited much discussion in the newspapers and among the public, and was followed as usual by a great eruption of pamphlets. But a most extraordinary difference of opinion soon manifested itself among the zealous advocates of a decimal system. No less than eleven different schemes were brought forward, and urgently pressed, all based upon some particular coin of the existing moneys. Most of them, too, were hostile to the adoption of any rival scheme, and preferred to maintain the existing coinage rather than have any plan but their own adopted. These rival schemes introduced greater complexity into the question. In 1855 the House of Commons passed a resolution, by 135 to 56, in favor of the further extension of the decimal system. But before finally deciding, the Government referred the whole matter to a

Commission, composed of Lord Monteagle, Lord Overstone, and Mr. J. G. Hubbard. This Commission made a preliminary report in April, 1857, signed by all its members. They examined a number of witnesses, who were adverse to the pound and mil scheme : and they prepared a series of questions to be addressed to eminent persons who lived in foreign countries, where the decimal system was already in use. Moreover, Lord Overstone prepared a series of questions framed with a view of bringing into notice and examination some of the advantages of the present system of coinage : and some of the principal difficulties and objections which have been suggested as attending the introduction of a system of decimal coinage into this country

The evidence given before this Commission, together with the experience gathered from foreign countries, and the answers to Lord Overstone's questions may be said to have completely changed the aspect of the question, and to have conclusively settled it against the decimalisation of the British coinage. Lord Monteagle\* retired from the Commission, and the final report was delivered on the 5th April, 1859, signed by Lord Overstone and Mr. Hubbard. The conclusions which they jointly arrived at were, that the experience of foreign countries, where the decimal coinage had been introduced, was full of instruction and warning to us : but the circumstances of the country were so different that no safe conclusion could be drawn from them. That commercial men as well as others were greatly divided upon the subject. That it was difficult to come to any useful conclusion in the abstract as to the merits of the decimal system : and distinct and peculiar difficulties attended each separate form proposed for adoption. That the penny scheme had many advantages over the pound and mil scheme : nevertheless, that the state of public feeling would not allow the pound to be disturbed. That as regarded the pound and mil scheme there appeared to be an advantage in calculations, though the extent of the advantage was much disputed. That with regard to the reckonings of the shop and the market, and for mental calculations generally, the present system was unquestionably the best, as well as regarded the coins, provided by the rival schemes. That the pound and mil scheme could not be

looked upon as a demonstrative improvement, but rather as a doubtful experiment, attended with many transitional difficulties, partly of a moral character, arising from the difficulty of changing established usages and habits, and partly mechanical, arising from the non-interchangeability of the old and new coins. The advantages of decimal accounts might be attained without disturbing the coinage by a more extensive use of the practice now adopted at the National Debt Office, and the principal Assurance Offices. That under existing circumstances it was not desirable to disturb established habits by an attempt to introduce any new principle into the coinage alone

These were the joint resolutions of the two Commissioners. But Lord Overstone prepared a draft report most ably and fully discussing the evidence obtained by the Commissioners, and weighing the alleged advantages and disadvantages of each scheme with perfect impartiality. The clear and convincing way in which the question is argued in all its different bearings may be considered to have finally disposed of the question of decimalising the British Coinage: and this report should be carefully studied

## CHAPTER VII

## ON BIMETALISM

1. The question of Bimetallism is only part of the general Theory of the Coinage contained in the preceding Chapter: but it has recently acquired so much importance from the very serious fall in the value of silver, entailing the severest distress on the Government of India, and the persistent efforts of a powerful party to promote its restoration, that it deserves the prominence of a separate chapter

Most persons of common sense had supposed that after this country had been plagued and tormented for five hundred years with the futile attempt to maintain Bimetallism, whereby all commerce had been thrown into confusion, and it had been finally abandoned as hopeless—after Oresme and Copernicus had shown that its fundamental principle is erroneous—after Sir Thomas Gresham had explained to Queen Elizabeth that it threw the whole system of Coinage into confusion—after Locke, Petty, Harris and all the ablest writers on Money had shown that a single metal only should be adopted as the standard of the Coinage—after Newton had shown that a difference between the legal ratio of the coins and the market value of Bullion had caused the underrated Coin to disappear from circulation and the overrated Coin only to remain—after Lord Liverpool's masterly and unanswerable Treatise on the subject had shown that Locke's doctrine was the true one—after the Government of India had fully considered the question, and in a well considered and elaborate State Paper had utterly condemned Bimetallism with the most weighty and unanswerable arguments—after the British Government in 1816, being perfectly well informed on the question in all its bearings had established Gold Monometallism in England, and instituted the most perfect system of Coinage ever devised by the ingenuity of man—after a debate on

Bimetalism in the House of Commons in which Mr. Herries, the Master of the Mint, Mr. Huskisson, and Sir Robert Peel, the ablest financiers of the day, who were thoroughly well acquainted with the facts and reasonings upon which our present system of Coinage was founded, had pointed out that an attempt to restore Bimetalism, when the value of silver had only fallen five per cent., would bring about a national bankruptcy in twenty-four hours, and the motion was negatived without a division—after every Government in Europe in tardy recognition of the true principles of Economics as proved by the experience of ages and the unanswerable arguments of Oresme, Copernicus, Gresham, Locke, Lord Liverpool and others, have one after another repudiated Bimetalism and adopted a single standard—the question had been finally settled and that it was proved to demonstration that Bimetalism is nothing but an exploded fallacy, utterly impracticable from the very nature of things

Nevertheless it is not so. The undeniable disturbances of commerce caused by the very serious fall in the value of silver in recent years, which we are by no means assured has yet reached its limit, has re-opened the whole question, and the world, and especially this country, is now being flooded with torrents of declamation to restore what has been proved by the experience of ages in every country to be absolutely impossible

We are not concerned here to state the causes which have produced the remarkable change in the relative value of gold and silver, the most serious and sudden which has ever taken place, as its causes are perfectly well known: we are only concerned with the remedy proposed by a numerous set of persons

### Sole Point at Issue

2. Notwithstanding the torrents of speaking and writing which have been poured forth on the subject, the whole question is reducible to a single simple issue—

Suppose that Governments issue Gold Coin and Silver Coin in unlimited quantities, and endeavor to establish a fixed ratio between them by law—

(1) Is it the legal ratio fixed between the Coins which governs the value of the metals in Bullion in the market?

(2) Or is it the market value of the metals in Bullion which governs the value of the coins ?

(3) And if each Government separately cannot, under such circumstances, maintain unlimited quantities of Coin in circulation at a fixed ratio—can all the Governments in the world maintain unlimited quantities of Coin in circulation if they agree to enact a uniform ratio ?

The Bimetallists maintain the first of these propositions—the Monometallists maintain the second. To the third proposition the Bimetallists reply in the affirmative: the Monometallists reply in the negative

Our business is to investigate which of the parties is right in their contention

As the representative of the Bimetallists we may cite Senator Stewart, of Nevada, who says that “the free and unlimited coinage of both Gold and Silver has always maintained the parity of two metals at the ratio established by law”

The reckless audacity of such a statement is enough to take away one's breath: because the experience of centuries in every country in Europe, and the rudimentary Laws of Economics show that it is the exact reverse of this statement which is the truth

### *Oresme and Copernicus on Money*

3. The Theory of Money was the first great department of Economics which was established in modern times on solid foundations by Nicolas Oresme, councillor to Charles V. of France, and Bishop of Lisieux, and Copernicus

It has been shown in the preceding chapter that the Sovereign can only fix the weight, the purity, and the denomination of the Coin: but cannot fix its Value, *i.e.*, its power of purchasing or exchanging with other commodities: and that when traders sell their goods for coin they do so for a certain quantity of Bullion, no matter into how many pieces it may be divided. So that if Sovereigns diminish the weight of their coin, or debase its purity, traders invariably raise the price of their goods so as to secure a certain amount of pure Bullion. Coins are nothing but pieces of

stamped Bullion, and their value can by no possibility differ from the value of Bullion by more than the cost of changing the metal from the form of Bullion to that of Coin : they are nothing but commodities which simply follow the value of Bullion

### *Bimetallism in France*

4. Charlemagne established the system of Coinage which was adopted throughout Western Europe. He enacted that the pound weight of Silver should be the standard, and divided it into 20 *solidi*, or shillings, and each *solidus* into 12 *denarii*, or pennies. Hence 20 *solidi* were called a Pound, no matter what the weight of each *solidus* was. But the *solidus* was merely money of account : the only actual coin was the *denarius*, or penny

The Kings of France maintained the purity and weight of the Coinage till 1108, when Louis VI. issued a very debased Coinage, half copper and half silver : which made such terrible confusion that he was obliged to promise that he would not debase it any further

Louis VI. issued a Gold coinage called the *franc d'or* in 1113. The pound weight of gold was cut into 20 of these pieces, which was its Mint Price : and as the Mint Price of Silver then was £2, it follows that the ratio of Silver to Gold was then 1 to 10. The *franc d'or* continued at that weight till 1305, when the Mint Price of gold was raised to £14, and after that the changes both of Gold and Silver were so frequent till 1726, that it is impossible to give them here at full length : but we have done so elsewhere.<sup>1</sup>

St. Louis (1226) restored the Coinage to a certain degree of purity and fixity of weight, and when the following kings produced the greatest misery and confusion by debasing their money it was always the standard of St. Louis that was demanded. But they never could refrain from debasing their coin, under the delusion that their *fiat* could make debased coin have the same value as good coin. Philip le Bel (1285) had the honor of being singled out by Dante as a false coiner—

“ Li si vedra il duol che sopra Senna  
Induce, falseggiando la moneta ”

<sup>1</sup> *Dictionary of Political Economy*. Art. Coinage of France, p. 509

“There shall be seen the woe that he shall pour  
Along the Seine by uttering coin debased”

And so subsequent kings continued to do, causing terrible distress and seditions, ruining the merchants and driving away trade from the country. Not only did the kings debase the coinage *ad libitum*, but they repeatedly changed the Mint Price of Gold and Silver. In twelve years from 1346 to 1357 the Mint Price of the gold florin was changed 118 times

Charles V. (1364) from his experience as Dauphin during the disastrous wars and captivity of his father, had learnt that the debasement of the coinage had greatly impoverished France, and had contributed to the political troubles which had so cruelly torn the country. The wise king having greatly at heart to repair the evils, and restore his country to its ancient grandeur, paid the greatest attention to the state of the Coinage. He referred the matter to one of his councillors, Nicolas Oresme, afterwards Bishop of Lisieux, who wrote a *Treatise on the Coinage*, which may justly be said to stand at the head of modern Economic literature. This contains a masterly account of the true functions of Money, and, condemns in the most energetic language all changes in the weight, rating, and the purity of the Coinage

• After his reign, however, these evil practices were resumed, and continued to flourish in all countries in Europe: they were carried to less extremes in England than in any other country. • They were called *morbus numericus*. They prevailed in Poland • as well as in other countries. At the request of Sigismund I., Copernicus drew up, in 1526, a *Treatise on Money*, which has recently been discovered and printed in the new edition of his works. The doctrines of Oresme and Copernicus have been repeated by numerous Economists since, and are now accepted by all sound Economists: so that it may be said that the Theory of the Coinage was the first great branch of Economics which was firmly established in modern times

As this noble *Treatise* is the ablest Economical work which appeared in Europe for centuries, and is the foundation of the true Theory of Money, and moreover is very little known, we may give a brief analysis of it

Nicolas Oresme, one of the most distinguished men whom



France produced in the fourteenth century, was a native of Normandy, born either at Caen or Bayeux. He was educated at the Collège de Navarre, and in 1355 was elected its Grand Maître. He was appointed Count Bishop of Lisieux in 1377, and died in 1383.

He was appointed by Charles V., justly surnamed the Wise, one of his Councillors. Charles V. was profoundly impressed, when Dauphin and Regent during the captivity of his father, with the frightful evils inflicted on his unhappy country by the degraded and debased state of the Coinage, and referred the matter to Nicolas Oresme, who, in answer to the appeal of his sovereign, produced his great *Traictie de la première Invention des Monnaies*, in 26 chapters<sup>1</sup>.

Oresme begins by explaining the nature and uses of money. He shows that nations at first used to barter their products directly with each other. But as great inconveniences and quarrels arose from this, money was invented to serve as a medium to facilitate the exchanges of products. He shows that gold and silver were selected for this purpose from the natural qualities they possess. At first gold and silver were exchanged by weight without any stamp, but it was afterwards found more convenient to cut the metal into pieces of a definite weight and fineness, and to impress them with a stamp to certify to the public that they were of this fixed weight and fineness. As these pieces of metal, called coins, were for the use of the public, private persons were not allowed to stamp them: but this was reserved for the public authority, and therefore such coins could only be issued by the Prince, who should forbid any private person to do so under pain of death. But though the Prince should coin and issue this money, it did not belong to him as his private property, but to the whole community. And as the money belongs to the whole community it ought to be struck and issued at the public expense, with a small charge for seignorage. Nor should any change be made in the weight, fineness, or denomination of the coinage.

At this period and for centuries afterwards, Coins were issued.

<sup>1</sup> It was republished by M. M. Guillaumin et Cie., along with the *Treatise of Copernicus*. Paris, 1864.

at a fixed legal ratio to each other, which at the present day is called Bimetallism. Oresme did not then perceive the impossibility of maintaining such a system. But he showed that such a ratio ought to be fixed strictly according to the natural, or market, value of gold and silver : and the ratio should not be changed except in consequence of a change in the market value of the metals. But this change must not be made by the arbitrary will of the Prince : because if he had the right to bestow an arbitrary price or value on money he might as well claim to fix the price or value of all the products in the kingdom : which would be an intolerable tyranny, and subject to the maledictions quoted by our Lord from Isaiah on those who make unjust laws

Thus we see that Oresme expressly lays down that the legal ratio of the Coins must be adjusted to the natural, or market, value of the metals, and he never conceived such a fatuous idea as that fixing the ratio of the coins could regulate or govern the market value of the metals, as so many persons maintain at the present day

Oresme then inveighs against changing the denomination of the Coins, which he says is just the same thing as changing their ratio: and he says it would be a great scandal and falsity to call a thing a pound which is not a pound

To alter the weight of the coin is utterly unjust and disgraceful to the Prince, because his image is impressed upon it expressly to certify its weight and fineness, and if it does not correspond to the reality it is a base falsity and a fraudulent cheat. Measures of corn, wine, and other things are sealed with the public seal of the Prince, and if any fraud is committed in these it is held to be infamous : similarly the stamp impressed on the coin certifies the truth of its measure, weight, and purity, who then can sufficiently express how detestable it is in a Prince to diminish the weight of the coin ? Such a thing is condemned in numerous places by our Lord, and in Deuteronomy such things are said to be held in abomination by God

To debase the Coin is equally wicked as to diminish its weight, for it falsifies the stamp, which thus becomes a liar and commits perjury, and bears false testimony. And this falsification is even worse than diminishing the weight, because it is less easily detected

by the people, and can injure them still more. The sole purpose which a Prince can have in changing the weight, purity, or denomination of the coin is his own private profit. But all such gain is evil and unjust, and is fraud and falsity, and against nature. It is even worse than usury, which was then held to be a theological sin of the first magnitude

Moreover, in consequence of these changes and debasements of the coin, gold and silver diminish in the Kingdom, and nothing can prevent them from being exported to other places where they have a higher value. So also by changes and debasements of the money foreign merchants cease to bring their goods into the country, for what chiefly induces a merchant to import his wealth into a country is good and certain money. Such tamperings with the money throw all commerce into confusion, and destroy all confidence

Such is a sufficient account of Oresme's argument ; for it at once contradicts the assertions of the Bimetallists, and expressly says that any change in the legal ratio of the coins must follow the changes in the market value of the metals. He gives no countenance to the idea that a fixed legal ratio between the coins can control the market value of the metals. Moreover, he anticipated by 200 years what we have designated as the Law of Gresham, that the degradation and debasement of the coin causes gold and silver to disappear from circulation. But he did not anticipate the doctrine of Locke, that money of a single metal should be adopted as the standard, and that all others should be made subsidiary

The treatise of Oresme was written a hundred years before printing became general, and was merely drawn up for the consideration of Charles the Wise, and consequently did not get into general circulation and become known. It was not known to Copernicus when the same problem was submitted to him. But Copernicus develops exactly the same principles, which it is not necessary to set forth at so great a length

### **Copernicus on Money**

Nicolas Copernicus, the founder of modern astronomy, and one of the founders of a most important branch of Economics

was born at Thorn, in Polish Prussia, in 1473. He early acquired great distinction in Mathematics, which he studied under the most distinguished Professors of the day. He was appointed a Canon of Frauenberg about 1500

In 1522 Copernicus came under the notice of Sigismund I., King of Poland, of which Prussia then formed a part, by being sent to the Prussian States to seek redress for an injury which the *Grands Maîtres* of the Teutonic Order had done to the Chapter of Warmie, of which he was a member, as Canon of Frauenberg. Besides that, ever since the peace of Thorn in 1466, the *Grands Maîtres* had inflicted the greatest injury on the public by debasing their money. The cities of Thorn, D'Elbing and Dantzic, imitated their example, and outvied each other in similar practices.

Sigismund wished to put an end to this disorder, and to assimilate the money of Prussia with that of the rest of Poland. Sigismund found a zealous supporter in Copernicus, who knew that the debased money had driven out the good money, which was either melted down or exported

Albert of Brandenburg had coined money with only 1 part pure silver and 11 parts of alloy : whereas the former proportion had been 9 parts fine and 3 parts alloy

Copernicus used all his efforts to have the Prussian money restored to its proper weight and purity ; but he only excited against himself the hostility of the representatives of Thorn, d'Elbing and Dantzic, who claimed the right to debase their money

At the request of Sigismund Copernicus drew up this masterly Treatise, entitled *Monete cudende ratio*, in 1526, and Sigismund carried out its recommendations in 1528

This Treatise in the handwriting of Copernicus is preserved in the archives of Koenigsberg. • It was discovered in 1815 by Severin Vater, Professor of Koenigsberg, bound up in a volume with several treatises on Prussian money. It was published in the *Pamiętnik Warszawski* (*Memorial of Warsaw*) in the number for August, 1816 : and it has been included in the magnificent edition of the works of Copernicus published at Warsaw in 1854.

Although Copernicus had no knowledge of the treatise of Oresme, written 160 years before his own, it will be seen that the

doctrines maintained in it are identical in every particular with those of Oresme : and thus Oresme and Copernicus—*lucida sidera*—are the Castor and Pollux of Monetary Science

Copernicus says that the four principal causes of the decadence of States are civil discord, pestilence, the barrenness of the land, and the debasement of the Coin

Gold or Silver impressed with a stamp are the common measure of value : but this measure ought always to be fixed by established law : otherwise it brings disorder into the State : just as if the measures of length, capacity, and weight were not fixed quantities

This estimation is based on the purity of the metal, but its value must be distinguished from its estimation

The use of money arises from necessity. Exchanges might be effected by weighing out the gold or silver : as these metals by universal consent are articles of value : but it would be very inconvenient to carry scales and weights about with one, and all persons are not able to perceive the purity of the gold and silver. So it is universally agreed to stamp the pieces, by authority, to certify that they contain the proper quantity of gold and silver

It is usual to alloy the money with copper, because it is less liable to be hoarded and melted down, than if it was of pure metal : it makes the coins of a more convenient size and more durable

The money is in its best condition when it contains slightly less gold or silver than it is purchased for, in order to defray the expense of coining

Copernicus then describes the causes of the loss of value in money. It is not proper to introduce new and good money while the old is degraded and continues to circulate : and it is still worse to issue a new money still more inferior. *This not only diminishes the value of the old money, but quickly drives it out of circulation*

Copernicus then gives details of the Prussian money, and shows the consequences which the debasement of the coin has produced. He says that the money was being continually degraded, and it also degraded the existing money. The resul

will be that all Gold and Silver will leave the country, and nothing but copper will remain: which will arrest the import of foreign merchandise, and ruin all commerce. What foreign merchant would exchange his wares for copper money? and which of us could buy foreign goods with such money? So long as the Prussian money is so degraded only the goldsmiths and bullion dealers can profit by it. They cull out the pieces of the old money, which they melt down and sell the silver. When the old coin has nearly disappeared, they pick out the best of what remains, leaving nothing in circulation but the worst coin. Then comes the universal cry that gold and silver, corn, and all other provisions, the work of artisans, and all other things which are in daily demand by men have risen in price. Our indolence only prevents us from seeing that this rise in the price of everything only proceeds from the debasement of the money. In fact their price increases and diminishes in proportion as the money which we estimate, not in brass or copper, but in gold and silver, is deteriorated or reformed: because gold and silver constitute the basis of money, and determine its value

It may be said that base money is more convenient for the purposes of life: it aids poverty: it lowers the price of corn: and facilitates the acquisition of other necessities: good money on the contrary makes everything dearer: but good money makes every thing dearer for farmers, and all those who have to make fixed payments. This idea will please those who are deprived of the right to coin money. Perhaps also it will please merchants and artisans, who incur no loss in selling their goods and their products, no matter what is the price of gold. For the more the money is debased, the more they charge for their goods and labor. But in regard to the public utility, they cannot deny that good money is advantageous, not only to the State, but to themselves, and to all conditions of men; and that debased money is most injurious. In fact, we see that those States which possess good money flourish, whereas those which have debased money decay and perish. While Prussia had good money it flourished, but the increasing debasement of the coin has, with other calamities, nearly brought it to ruin

If it is intended to remedy the evils to Prussia by restoring

the money, it is necessary to put down the confusion which arises from the multiplicity of mints. That prevents equality of value : and it is more difficult to keep a number of mints to their duty than one. And the money must be coined in conformity to fixed law. Princes have no right to derive any profit from their coinage : they must only add sufficient alloy to defray the cost of mintage : that it may make the coin slightly more valuable than bullion, and take away the temptation of melting it down

Besides this, in order not to fall into the confusion which arises from allowing the new money to circulate together, it is necessary as soon as the new money is issued to demonetise the old, and totally to forbid its use, after exchanging it at the mints at its market value. Otherwise it is useless to attempt to issue good money. The co-existence of the two moneys would destroy all the advantage of the new, and we should still have all our present confusion. It would cause inextricable confusion to have the two moneys circulating together. It is necessary, therefore, when new money is issued entirely to demonetise the old

It has been said that gold and silver are the basis which determines the value of the money. The remarks made respecting the silver money also apply to gold. It remains to explain the mode by which the relation of gold and silver money is determined. It is first necessary to ascertain the relation between pure gold and pure silver. *Because the same ratio exists between gold and silver when pure as when coined.* The same ratio exists between gold in bullion and gold in coin as between silver in bullion and silver in coin, provided they are of the same purity and the same weight. *And the coins must have the same ratio to each other as the metals have as bullion.* Copernicus then gives some details of the relative purity of certain moneys. He says that at that time in all countries one pound of pure gold was worth twelve pounds of pure silver

Copernicus wrote his treatise entirely without the knowledge of the preceding one of Oresme. But the doctrines maintained by these two great writers are absolutely identical. They are—

1. That it is impossible for the Prince, or the Law, to regulate the value of the Coins ; or of any other article .

2. That all that the Prince or the Law can do is to maintain the Coinage at a fixed denomination, weight, and purity

3. That it is robbery for the Prince to change the denomination, diminish the weight, or to debase the purity of the Coinage

4. That it is impossible for good full weighted Coin, and for degraded and debased Coin to circulate together : but that all the good Coin is hoarded, melted down, or exported : and the degraded and debased Coin alone remains in circulation

Thus these great writers fully recognised and anticipated what we have termed the Law of Gresham

5. That the Coins of Gold and Silver must bear the same ratio to each other as the metals in bullion do in the market : and that this ratio must never be changed except in consequence of a change in the market ratio of the metals. They quite perceived the impossibility of keeping Gold and Silver Coins in circulation together in unlimited quantities, at a legal ratio differing from the market ratio of the metals

Thus the doctrines laid down by Oresme and Copernicus are in diametrical contradiction to the allegations of the Bimetallists of the present day

It was left to the genius of Petty and Locke to discover that the true remedy for the perpetual confusion caused by attempting to keep Gold and Silver Coins in unlimited quantities in circulation together at a legal ratio differing from the market ratio was to adopt one metal only as the standard, and to make Coins of any other metals subsidiary to it

The sage counsels of Oresme were utterly disregarded by monarchs subsequent to Charles the Wise. They persisted in their old courses of degrading and debasing the Coins, and making perpetual changes in their Mint Prices, *i.e.*, in the number of the Coins which they struck out of the marcs of Gold and Silver. Moreover, they changed the rating of these Coins to each other as often as they pleased. When they had debts to pay they cried the Coin up, when they had debts to receive they cried the Coin down. In our present space we have no room to enter into more details : but we have given them elsewhere.<sup>1</sup> These miserable

<sup>1</sup> *Dictiondry of Political Economy*. Art. Coinage of France.



practices were at last put a stop to in 1726: and no further changes were made in the Mint Price of the Coins till 1793, when the decimal system was adopted. But between 1113 and 1726 there were 146 changes in the Mint Price of the marc of Gold, and 251 changes in the Mint Price of the marc of Silver. Such is the picture of Bimetalism in France during 613 years

At last, however, in 1726, the Mint Price of the marc of Gold was fixed at £740 9s. 1*d.*, and the Mint Price of the marc of Silver at £51 3s. 3*d.*: and the Ratio of Gold to Silver was fixed at 1 to 14½. But in this ratio the value of Silver was fixed too high, and the Law pointed out by Oresme, Copernicus and Gresham took effect, the Gold was exported and Silver became the usual standard of France. In 1803 the ratio was changed 1 to 15½, at which it nominally continues to the present day

The period between 1803 and 1873 is cited by Bimetalists as the golden age of Bimetalism. But if they imagine that there was during that period a general circulation of Gold and Silver Coins in unlimited quantities, they are under a woful delusion

The French liberating armies pillaged not only all the Sanctuaries in France of their vast masses of silver plate, but also all the treasuries and sanctuaries of the countries they came to liberate. Immense quantities of silver plate were sent to the Mint to be coined: the consequence was that while the legal ratio of silver to gold was 15½ to 1, the market ratio became 17 to 1. No gold coin, therefore, got into general circulation. During the period from 1803 to 1820 there was for 11 years a premium on gold, sometimes as much as 3 per cent., which of course prevented gold coming into general circulation. But after 1820 the premium on gold rose very considerably, and between 1820 and 1847 it was usually on an average about 8 or 10 francs per mille, but in many years 18, 19, 20, and 21 francs, which of course utterly precluded any gold getting into circulation. I myself can testify that in 1839 there was not to be seen a gold coin in France in common use

But in 1851 a great change took place. The gold discoveries in California and Australia caused floods of gold to be imported into Europe, and in 1851 silver rose to a premium: then the money in common use changed from silver to gold. I was

residing in a seaport town in 1857, and every steamer which came in was loaded with casks of Scotch whisky going to be transmuted into French brandy, and every steamer that went out had its decks piled with bags of silver five franc pieces. The same was true at every other seaport. Silver departed from France in floods. Every steamer and every diligence that left France carried away loads of these five franc pieces. At last the scarcity of silver became so great that it was found necessary to coin these pestilent five franc pieces in gold.

The reverse phenomenon began again in 1867. The first flood of gold having somewhat subsided, gold again rose to a premium, and silver displaced gold in circulation.

Silver had thus begun to fall in value in 1867, and after the war of 1870-71, Germany being for the first time unified, a great reform of the Coinage was carried into effect. As was natural, a single gold standard was adopted for the German Empire, and the general system of Coinage was modelled on that of England, which had proved so successful. Considerable quantities of silver were sold off to purchase gold, and this gave a further jog to the fall of silver. At last, in 1874, things became so serious that the Government was obliged to close the mints to the free coinage of silver, and thus the Bimetallic theory exploded.

Bimetralists are in the habit of attributing the disruption of their fantastic dream to the closing of the French mints in 1874. But such an idea is a delusion. The French mints were closed because it was impossible to maintain Bimetalism. And even if they had not done so then, they would have been compelled by necessity to do so very soon afterwards. Because that sudden and terrific downward plunge of silver, which is entirely unexampled in the history of the precious metals, began soon after 1874. The ratio of silver to gold at the present day is as 1 to 35, and there is no certainty that it may not go much lower still. The Bank of France has an immense stock of silver which has the nominal value of about £50,000,000 sterling. But how does it bear this nominal value? Because it was originally valued at  $15\frac{1}{2}$  to 1 as to gold: and it is only maintained at this nominal value by rigorously closing the mints to the coinage of silver. If the French Government were to open the mints to the free

coinage of silver at its present price, this immense stock of silver would at once lose about £28,000,000 of its nominal value. If Bimetallists think that the French Government will yield to their clamour, and give effect to their impracticable fad, they are utterly beyond the reach of sane argument 5562.

### *Bimetallism in England and India*

5. As in all the rest of Western Europe, the Monetary Unit in England in the days of William I. was the pound weight of Silver divided into 240 pennies. Except during the turbulent reign of Stephen, the Kings of England did not degrade or debase their Coins. But immense numbers of false coiners sprang up, and notwithstanding the severest penalties of mutilation denounced against them, it was found impossible to suppress them. Moreover, large quantities of base money were imported from abroad

But during all that time the money was merely hammered, so that it left an irregular edge. This produced great clipping of the coin. In 1205 John issued a proclamation suppressing the clipped coin. All that wanted more than 2s. 6d. in the pound was declared to be illegal and withdrawn from circulation. In order to test the Coin, legal weights were supplied at the Mint to all who applied for them. If any clipped coins were found in the possession of any one they were to be bored through, and the owner was to be treated as a thief, and forfeit his goods to the King. The same disturbances of the Coinage continued during the reign of Henry III. In 1257, in the 41st year of his reign, he issued a Gold Coinage, but the merchants refused to receive it, and it was withdrawn

In this troubled reign the Coinage was clipped down to half its weight: prices rose in proportion, and foreign merchants refused to trade. But up to this time the Kings of England had not supposed that they had any right to coin more than 240 pennies out of the pound weight of silver, and yet to call the diminished Coins by the same name

That great sovereign Edward I. was the first to begin the evil practice of debasing the Coin. In 1300, the 28th year of his reign, he coined the pound weight of silver into 243 pennies

The same disturbances of the Coin continued through the reign of Edward II., and repeated proclamations were issued against the importation of base money from abroad

Edward III. found the Coinage in a dreadful state from the feeble and incapable reign of his father, and it was one of the first abuses he was called on to remedy. In 1331 the state of the Coinage was brought before Parliament, and a Committee was appointed to devise a remedy. The exportation of good money was forbidden on pain of death: and it was forbidden to melt it down on pain of forfeiture. But all these penalties were ineffectual. The financiers of that age had not discovered the great fundamental law of the Coinage, afterwards revealed by Oresme, Copernicus and Gresham, that good and bad money cannot circulate together: but that bad money always drives out good money

This constant corruption and debasement of the Coins repeatedly attracted the attention of Parliament, and they made useless and ineffectual laws to prevent the exportation of good money and the importation of bad money: denouncing merciless penalties on offenders, and offering rewards to informers

In 1343, in consequence of the chronic clipping and debasement of the Coins, Parliament called in the advice of certain merchants, goldsmiths, and moneyers, who were charged to devise means to prevent the exportation of good money and the importation of base money. On their advice a Statute respecting Silver Coin was passed, but as they had not discovered the great master secret of the question, it was wholly ineffectual

In 1344 it was resolved to coin Gold money, and thus Bimetallism was established in this country, and for 470 years the futile attempt was made to keep gold and silver coins in unlimited quantities in circulation together at a fixed legal ratio

There is no use in giving further details of this hopeless struggle. It may be supposed that it is only in recent times that Parliament has been pestered with these wearisome Currency debates. But this is very far from being so. For five centuries they were constantly recurring

Henry VIII. was the first not only to diminish the weight of the Coin, but to debase their purity, which gave rise to great public distress and repeated complaints

In the reign of Edward VI. the Coinage was still further degraded and debased. That straightforward preacher, Latimer, vehemently denounced these abominable practices, which gave his enemies excuse to charge him with disloyalty, which he ingeniously turned off by showing that the prophet Isaiah had done exactly the same thing, and had denounced the bad silver of Jerusalem. He said—"I chaunced in my last sermon to speake a mery word of the new shillyng (to refresh my auditorie), how I was lyke to put away my new shillyng for an olde groat. I was herein noted to speak seditiously. Yet I can comfort myself in one thing, that I am not alone, and that I have a fellow—a companion of sedition—and wot ye who is my fellow? Esay the prophet. I speak but of a little preaty shillyng, but he speaketh to Hierusalem after another sort, and was so bolde as to meddle with their coine. Thou proud, thou conetous, thou hautie citie of Hierusalem! *Argentum tuum versum est in scoriam*. Thy silver is turned into what?—into testoons? *Scoriam*, into dross. Ah! seditious wretch, what had he to do with the minte? Why should he not have left that matter to some master of policie to reprove? Thy silver is drosse, it is not fine, it is counterfeite: thy silver is turned, thou haddest good silver. What pertained that to Esay? Mary he espied a piece of divinitie in that polysie, he threateneth them with God's vengeance for it. . . . He imputeth it to them as a great crime. He may be called a master of sedition indeede. Was not this a seditious harlot to tell them this to their beardes? to their face?"

At last the public confusion was so intolerable, that the Council of Edward VI. saw that it was indispensable to bring the coin back to its old standard. The measures for the complete restoration of the Coinage were nearly completed when the sickly boy died. Mary on her accession in 1553 found the reformation of the coin nearly completed, and resolved to take advantage of the popularity attending it, at the same time intending to debase it by her Mint indentures. During this short reign the usual proclamations were issued against importing counterfeit and base coin from abroad, and exporting good coin: and the usual complaints were made that persons both native and foreign, bought up the gold coin at higher rates than the legal one, and melted them down and exported them

During all this long period good coin had been constantly issued from the Mint, but no measures had been taken to demonetise and withdraw from circulation the clipped, degraded, and debased coin, as Copernicus pointed out<sup>1</sup> was indispensable to be done. But the statesmen and financiers of the day were utterly perplexed at the extraordinary disappearance of the good coin. They seemed to think that the people were inspired by the Evil One to prefer the degraded and base coin, and to reject the good coin. They had no Oresme or Copernicus to explain to them that it was an assured law of nature that bad coin always drives good coin out of circulation.

No sooner had Elizabeth acceded to the throne than she turned her attention to complete the great reform of the Coinage begun by her brother, being moved thereto by the illustrious Gresham, who for the first time in this country pointed out to her that good and bad coin cannot circulate together. The *fact* was only too familiar by the experience of centuries, but no one in this country had previously discerned the necessary relation between these facts before Gresham. He addressed a letter to the Queen, explaining that the debasement of the Coin by Henry VIII. was the *Cause* of the disappearance of all the good Coin. Thus, for the first time in this country, he showed that the two facts were necessarily related as Cause and Effect. In 1858 we suggested that this great fundamental Law of the Coinage should be known by the name of Gresham's Law, and this has now been universally adopted. But at that time we were not aware that this great Law had been demonstrated by Oresme 162 years, and by Copernicus 32 years previously, as their treatises were not published for popular circulation till 1864. Nor is there any reason to suppose that Gresham had any knowledge of these treatises, as they were merely memorials drawn up for the information of their respective sovereigns, and did not get into general circulation. These three illustrious men were, therefore, independent discoverers, and therefore the Law ought to be named the Law of Oresme, Copernicus and Gresham.

In 1696 this Law had become common knowledge. In a pamphlet of that year it is stated thus<sup>1</sup>—

<sup>1</sup>A *Reply to the Defence of the Bank, setting forth the unreasonableness of their slow payments*. London, 1696

*“When two sorts of Coin are current in the same nation of like value by denomination but not intrinsically [i.e., in market value] that which has the least value will be current, and the other as much as possible will be hoarded,”* or melted down, or exported, we may add

This great fundamental Law of the Coinage is found to be universally true in all ages and countries, and was henceforth recognised and acknowledged in all subsequent discussions on the Coinage

It applies in the following cases—

1. If the Coinage consists only of a single metal, as in the early Coinage of England, and clipped, degraded, and debased Coins are allowed to circulate with good Coin, all the good Coin disappears from circulation. It is either hoarded, or melted down, or it is exported : all laws are ineffectual to prevent this : and the clipped, degraded and debased Coin alone remains current

2. If Coins of two kinds of metal, such as Gold and Silver, are allowed to circulate together in unlimited quantities, and if a legal ratio is attempted to be enforced between them which differs from their natural value in the market of the world, the Coin which is underrated disappears from circulation : it is either hoarded, or melted down, or exported : and the Coin which is overrated alone remains current

3. And, as a necessary corollary, it follows that it is impossible to establish and maintain a fixed Par of Exchange between countries which use different metals as their Standard Coin

This Law is not confined to single and separate countries : it is not limited in Time or Space : it is absolutely universal : and it is equally impossible for the whole world to maintain Coins of two or more metals in circulation, in unlimited quantities, at a fixed legal ratio, which differs from the natural or market value of the metals, as it is for single and separate countries to do so

The explanation of this problem, which was such an inscrutable mystery to statesmen and financiers for so many ages, is extremely simple. If shillings are allowed to circulate together, some of which are worth twelve pence and others only ninepence,

and every one is allowed to pay their debts in whichever of the coins they please, naturally they will pay their debts with the shillings worth nine pence, and keep the shillings worth twelve pence in their pockets: or if the shillings' worth twelve pence have no more value than the shillings worth nine pence, bullion dealers will collect all they can, and either melt them down into bullion, in which form they have more value, or export them to foreign markets, where they have their full value. It is exactly the same in all other cases where persons are allowed to pay their debts in things which have nominally the same value, but in reality have different values. When persons are allowed to pay their rents in kind, they naturally select the worst portions of the produce to pay to their landlords, and keep the best portions for themselves. If persons received an order for so many yards of cloth, and the law allowed two different yard measures to be used, one of three feet and the other of two feet, merchants would naturally fulfil the orders in yards of two feet rather than in yards of three. It is only natural that all persons should pay their debts in the cheapest form to themselves. So if the law allows debtors to pay their debts equally in Coins of different metals, which are rated equally in law, but whose values differ in the markets of the world, they will naturally pay their debts in the Coin which is rated too highly, and keep the Coins which are rated too low at home. Thus inevitably the Coin which is rated below its natural or market value disappears from circulation, and the one which is rated beyond its natural or market value alone remains current. And this is true whether the whole world does so, or only single and separate countries. If then the whole world were to agree to rate a Coin below its market value it would entirely disappear from circulation: for the whole world can no more by universal agreement make 9 equal to 12 than any separate country can.

For the very same reason it is impossible to maintain a fixed rate of Exchange between countries which use different metals as their standard Coins, because Coins are only received in foreign countries according to the market value of the quantity of bullion they contain, and as the value of the metals is constantly changing in the market, the value of the Coins must equally do so too.



We need not give further details of the Coinage after this date. It continued to be subject to the same disturbances from the same erroneous principles upon which it was issued. And the same futile proclamations, threatening terrible penalties against exporting good coin, which was attempted to be maintained at a fixed legal ratio below its market value, continued to be issued during successive reigns

In 1663 the first Coinage of guineas made from gold imported by the African Company took place. By the Mint indenture they were to be struck to be of the value of 20s. at the market rate of gold and silver at the time. But they were never made legal tender at that rate. They consequently circulated at the rate which people chose to place on them, and they soon rose above their rated value. Accordingly the old practices of clipping, melting, and exporting the silver coin were soon in operation, and the scarcity of money was complained of in Parliament. All these bad practices flourished during the short reign of James II.

In April, 1690, the goldsmiths complained to the House of Commons that they had ascertained that immense quantities of silver bullion had been exported. That many Jews and merchants had recently bought up vast quantities of silver to carry out of the kingdom, and had given three halfpence an ounce for it above its regulated value; that this had encouraged the melting down of much plate and milled money, whereby for six months no bullion had been brought to the Mint to be coined. A Committee of the House verified these allegations. It was shown that the profit of melting down the milled money for exportation was above £25 per £1,000, and that while the Mint price of silver was 5s. 2d. per ounce, the current price was 5s. 3½d.

In 1691 a posthumous work by Sir William Petty was published, in which, as far as we are aware, is the first announcement of the principle that the standard coin should be made of one metal only. He says<sup>1</sup> that Money is understood to be the uniform measure of the value of all commodities: that the proportion of value between pure Gold and fine Silver alters, as the earth and industry of men produce more of one than the other. That Gold

<sup>1</sup> *Political Anatomy of Ireland*, ch. 10

has been worth but twelve times its own weight of silver, but that of late it has been worth fourteen : *so there can be but one of the two metals of Gold and Silver to be a fit matter for Money*"

This is, as far as we are aware, the first enunciation of the great principle, that only one metal should be adopted for the standard Coin and measure of value. Nor are we aware of what amount of attention it received when it was announced

The evils produced by this flagrant state of the Coinage could no longer be neglected. The Treasury ordered their Secretary, Mr. William Lowndes, to make a report on the subject. In this Report<sup>1</sup> he gives a long and valuable history of the Coinage and its successive debasements in weight and fineness. After giving details of every Mint indenture for 400 years he says—"By the careful observing of which deduction here made from the indentures of the Mint for above 400 years past, it doth evidently appear that it has, been a policy constantly practised in the Mints of England (the like indeed having been done in all foreign Mints belonging to other Governments), to raise the value of the Coin in its extrinsic denomination from time to time as any exigence or occasion required : and more especially to encourage the bringing in of bullion into the realm to be coined (though sometimes when the desired end was obtained the value has been suffered to fall again), so that in the whole number of years, from the 28th Edward I. until this time, the extrinsic value or denomination of the silver is raised in about a triple proportion"

Mr. Lowndes appears here to be utterly insensible to the fact that each one of these debasements was a gross and shameful fraud. We cannot fail to observe also that Mr. Lowndes labors under the confusion of idea that raising the *name* of the Coin is raising its *value*. The extrinsic value of the Coin can by no possibility mean anything else than the quantity of things it will exchange for or purchase. And to call the quantity of things it will exchange for its *denomination* is a most pitiable confusion of idea.

Mr. Lowndes then says—"The which being premised, and every project for debasing the money being rejected as dangerous,

<sup>1</sup> *A Report containing an Essay for the Amendment of the Silver Coins.* London, 1695

dishonorable and needless [he fails to see that diminishing the weight of the coin is debasing it], it remains that our nation in its present exigence may avail itself by raising the value of its Coins, and this may be effected, either by making the respective pieces called crowns, half-crowns, shillings, to be lesser in weight, or by continuing the same weight or bigness, which is at present in the unclipped moneys, and ordaining at the same time that every such piece shall be current at a higher price in tale

“But before I proceed to give my opinion on this subject, it seems necessary for me to assert and prove an hypothesis, which is this, namely: That making the pieces less, or ordaining the respective pieces (of the present weight) to be current at a higher rate may equally raise the value of Silver in our Coins”

Mr. Lowndes then enters into an argument to prove that 60 pence may be made equal to 75 pence—a wild goose chase in which we decline to follow him

He proposed then that all the existing unclipped silver money should be raised to 6s. 3d. the crown, and other Coins in proportion, so that the shilling should pass for fifteen pence instead of twelve. That new Coins should be struck at the increased denominations and receive new names. The reasons he alleges for this are—“The value of the Silver in Coin ought to be raised to the foot of 6s. 3d. in every crown, because the price of standard silver in bullion is risen (from divers necessary and unnecessary causes, producing at length a great scarcity thereof in England) to 6s. 5d. an ounce. This reason (which I humbly conceive will appear irrefragable) is grounded chiefly upon a truth so apparent that it may well be compared to an axiom even in mathematical reasoning, to wit—That whensoever the extrinsic value of silver in the Coin hath been, or shall be, less than the price of silver in bullion, the Coin hath been, and will be melted down”

In this passage Mr. Lowndes fails to see that the reason why Silver had nominally risen from 5s. 2d. to 6s. 5d. an ounce was simply that the Coins were so degraded that 6s. 5d. only contained as much fine silver as 5s. 2d. ought to have done

Moreover, he again falls into the confusion of supposing that raising the *name* of the Coin raises its *value*. Why did he not carry his proposal a little further and propose that 1s. should pass

for the value of 20s. ? He totally failed to see that when persons exchange their goods for silver Coin, they do so to obtain a certain amount of fine silver bullion, and that it is perfectly indifferent to them what number of pieces of money it is contained in. These are precisely the ideas which our Bimetallists of the present day are afflicted with : and there is no use in detailing more of his maunderings

The proposal of Lowndes, coming from a person holding his official position, demanded an immediate notice and exposure. Locke performed the task in a manner worthy of his genius, which has remained unassailable ever since. He says<sup>1</sup>—" Raising of coin is but a specious word to deceive the unwary. It only gives the usual denomination of a greater quantity of silver to a less (*v.g.*, calling four grains of silver a penny to-day, when five grains of silver made a penny yesterday), but adds no worth, or real value, to the silver coin to make amends for its want of silver. That is impossible to be done, for it is only the quantity of silver in it that is, and eternally will be, the measure of its value: and to convince any one of this, I ask whether he that is forced to receive but 320 ounces of silver, under the denomination of £100, (for 400 ounces of silver, which he lent under the like denomination of £100,) will think these 320 ounces of silver, however denominated, worth those 400 ounces he lent ? If any one can be supposed so silly, he need but go to the next market, or shop, to be convinced that men value not money by the denomination, but by the quantity of silver there is in it. One may as rationally hope to lengthen a foot, by dividing it into 15 parts instead of twelve, and calling them inches, as to increase the value of the silver there is in a shilling, by dividing it into 15 parts instead of twelve, and calling them pence.

" Clipping of money is raising, without public authority, the same denomination remaining to the piece, that hath now less silver in it than it had before

" Altering the standard, by coining pieces under the same denomination with less silver in them than they formerly had, is doing the same thing by public authority. The only odds is, that by clipping the loss is not forced on any one (for nobody is

<sup>1</sup> *Further considerations concerning raising the Value of Money.* Works, Vol. IV.

obliged to receive clipped money): by altering the standard it is

“Altering the standard by raising the money will not get to the public, or bring to the Mint to be coined, one ounce of silver: but will defraud the king, the church, the universities and hospitals, and of so much of their settled revenue as the money is raised, *v.g.*, twenty per cent. if the money (as is proposed), be raised one fifth. It will weaken, if not totally destroy, the public faith; when all that have trusted the public, and assisted our present necessities, when Acts of Parliament in the million lottery, bank act, and other loans shall be defrauded of twenty per cent. of what these Acts were security for. And to conclude, this raising our money will defraud all private men of twenty per cent. in all their debts and settled revenues”

“Nothing, I humbly conceive, can put a stop to clipping, now it is grown so universal, and men become so skilful in it, but making it unprofitable

“Nothing can make clipping unprofitable, but making all light money go only for its weight. This stops clipping in a moment, brings out all the milled and weighty money, deprives us not of any part of our clipped money for the use of trade, and brings it orderly, and by degrees, and without force, into the Mint to be recoined”

Locke then enters into some details of the operations by Bills, of Exchange. At that period Silver was the standard coin of England and throughout the world. All Bills were, therefore, settled in silver

“I have spoken of Silver Coin alone, because that makes the money of account and measure of trade all through the world. For all contracts are, I think, everywhere made, and accounts kept, in silver coin

“Silver, therefore, and silver alone, is the measure of commerce. Two metals, as Gold and Silver, cannot be the measure of commerce both together in any country: because the measure of commerce must be perpetually the same, invariable, and keeping the same proportion of value in all its parts. But so only one metal does, or can do to itself: so silver is to silver, and gold to gold.\* An ounce of silver is always of equal value to an ounce of

silver, and an ounce of gold to an ounce of gold : and two ounces of the one or the other of double the value to an ounce of the same. But gold and silver change their value to one another : for suppose them to be in value as sixteen to one now : perhaps the next month they may be as fifteen and three-quarters or fifteen and seven-eighths to one. And one may as well make a measure, *v.g.*, a yard, whose parts lengthen and shrink, as a measure of trade of materials that have not always a settled invariable value to one another

“ One metal, therefore, alone can be the money of account and contract, and the measure of commerce in any country. The fittest for this use of all other is silver, for many reasons which need not here be mentioned. It is enough that the world has agreed in it, and made it their common money : and as the Indians rightly call it, measure. All other metals, gold, as well as lead, are but commodities

“ Commodities are moveables valuable by money, the common measure

“ Gold, though not the money of the world and the measure of commerce, nor fit to be so, yet may and ought to be coined to ascertain its weight and fineness : and such coin may safely have a price as well as a stamp set upon it by public authority, so the value be set under the market price. For then such pieces coined will be a commodity as passable as silver money, very little varying in their price : as guineas which were coined at the value of 20s., but passed usually for between 21s. and 22s., according to the current rate. But not having so high a value put on them by the law, nobody could be forced to take them to their loss at 21s. 6d., if the price of gold should happen at any time to be cheaper

“ From what has been said I think it appears—

“ 1. That silver is that which mankind have agreed upon to take and give in exchange for all commodities as an equivalent

“ 2. That it is by the quantity of silver they give, or take, or contract for, that they estimate the value of other things, and satisfy for them : and thus, by its quantity, silver becomes the measure of commerce

“ 3. Hence it necessarily follows that a greater quantity of

silver has a greater value : a less quantity of silver has a less value : and an equal quantity an equal value

“4. That money differs from uncoined silver only in this, that the quantity of silver in each piece of money is ascertained by the stamp it bears : which is set there to be a public voucher of its weight and fineness

“5. That gold is treasure as well as silver, because it decays not in keeping, and never sinks much in value

“6. That gold is fit to be coined as well as silver : to ascertain its quantity to those who have a mind to traffic in it : but not to be joined with silver as a measure of commerce ”

Locke then examines Lowndes's doctrine, that the value (or denomination) of the silver coin should be raised to 6*s.* 3*d.* the ounce because the price of standard silver had risen to 6*s.* 5*d.* the ounce

“This reason seems to me to labor under several mistakes, as—

“1. That standard silver can rise in respect of itself

“2. That standard bullion is now, or ever was, worth, or sold to the traders in it, for 6*s.* 5*d.* the ounce of lawful money of England. For if that matter of fact holds not to be so, that an ounce of sterling bullion is worth 6*s.* 5*d.* of our milled weighty money, this reason ceases : and our weighty crown pieces ought not to be raised to 6*s.* 3*d.* because our light clipped money will not purchase 6*s.* 5*d.* of that light money. And let me add here, nor for that rate neither. If, therefore, the author means here that an ounce of standard silver is risen to 6*s.* 5*d.* of our clipped money, I grant it him, and higher too. But then that has nothing to do with the raising our lawful coin, which remains unclipped, unless he will say too that standard bullion is so risen as to be worth, and actually to sell for, 6*s.* 5*d.* the ounce of our weighty milled money. This I not only deny, but further add that it is impossible to be so. For 6*s.* 5*d.* of milled money weighs an ounce and a quarter near. Can it, therefore, be possible that one ounce of any commodity should be worth an ounce and a quarter of the same commodity, and exactly of the same goodness ? for so is standard silver to standard silver. Indeed one has a mark upon it, which the other has not : but it is a mark that

makes it rather more than less valuable, or if the mark, by hindering its exportation, makes it less valuable, the melting pot can easily take it off

“The complaint made of melting down our weighty money answers this reason evidently. For can it be supposed that a goldsmith will give one ounce and a quarter of coined silver for one ounce of bullion : when by putting it into his melting pot he can, for less than a penny charge, make it bullion ? For it is always to be remembered, what I think is made clear, that the value of silver, considered as it is money and the measure of commerce, is nothing but its quantity, and thus a milled shilling, which has double the weight of silver in it to a current shilling, whereof half the silver is clipped away, has double the value. And to show that this is so, I will undertake that any merchant who has bullion to sell, shall sell it for a great deal less number of shillings in tale, to any one who will contract to pay him in milled money, than if he be paid in the current clipped money

“Those who say bullion is risen, I desire to tell me what they mean by risen ? Any commodity I think is properly said to be risen, when the same quantity will exchange for a greater quantity of another thing : but more particularly of that thing which is the measure of commerce in the country. And thus corn is said to be risen among the English in Virginia, when a bushel of it will sell, or exchange, for more pounds of tobacco : among the Indians when it will sell for more yards of wampampeak, which is their money : and among the English here, when it will exchange for a greater quantity of silver than it would before. Rising and falling of commodities are always between several commodities of distinct worths. But nobody can say that tobacco of the same goodness is risen in respect of itself. One pound of the same goodness will never exchange for a pound and a quarter of the same goodness. And so it is in silver : an ounce of silver will always be of equal value to an ounce of silver : nor can it ever rise or fall in respect of itself : an ounce of standard silver can never be worth an ounce and a quarter of standard silver : nor one ounce of uncoined silver exchange for an ounce and a quarter of coined silver : the stamp cannot so much debase its value. Indeed the stamp, hindering its free exportation, may



make the goldsmith who profits by the return of his money give one 120th, or one 60th, or perhaps sometimes one-thirtieth more, that is *5s. 2½d.*, *5s. 3d.*, or *5s. 4d.* the ounce of coined silver for uncoined, when there is need of sending silver beyond seas : as there always is, when the balance of trade will not supply our wants and pay our debts there. But much beyond this the goldsmith will never give for bullion, since he can make it out of coined money at a cheaper rate

“ It is said bullion is risen to *6s. 5d.* the ounce, *i.e.*, that an ounce of uncoined silver will exchange for an ounce and a quarter of coined silver. If any one can believe this, I will put this short case to him. He has of bullion, or standard uncoined silver, two round plates each of an exact size and weight of a crown piece, he has besides of the same bullion a round plate of the weight and size of a shilling, and another yet less of an exact weight and size of a threepence. The two great plates being of equal weight and fineness, I suppose he will allow to be of equal value, and that the two less joined to either of them make it one-fifth more worth than the other is by itself, they having all three together one-fifth more silver in them. Let us suppose then one of the greater and the two less plates to have received the next moment (by miracle, or by the mill, it matters not how) the mark or stamp of our crown, our shilling, and our threepence : can anybody say that now they have got the stamp of our Mint upon them, they are so fallen in value, or the other unstamped piece so risen, that that unstamped piece which a moment before was worth only one of the other pieces, is now worth them all three ? Which, is to say that an ounce of uncoined Silver is worth an ounce and a quarter of coined. This is what men would persuade us when they say that bullion is raised to *6s. 5d.* of lawful money the ounce, which I say is utterly impossible. Let us consider this a little further in another instance. The present milled crown pieces, say they, will not exchange for an ounce of bullion, without the addition of a shilling and a threepence of weighty coin added to it. Coin but that crown piece into *6s. 3d.*, and then they say it will buy an ounce of bullion, or else they give up their reason and measure of raising the money. Do that which is allowed to be equivalent to coining of a present milled crown piece into *6s. 3d.*, *viz.* : call

it 75 pence, and then also it must by this rule of raising, buy an ounce of bullion. If this be so, this self-same milled crown piece will, and will not, exchange for an ounce of bullion. Call it sixty pence, and it will not: the very next moment call it seventy-five-pence, and it will. I am afraid nobody can think change of denomination has such power”

Locke then goes through each of Lowndes's arguments and proposals one by one, and gives them such a refutation as would have delighted the heart of Chillingworth. Among other things he says—“It is true what Mr. Lowndes observes here, the importation of gold, and the going of guineas at 30s. has been a great prejudice and loss to the kingdom. But that has been wholly owing to our clipped money, and not at all to our money being coined at 5s. 2d. the ounce: nor is the coining of our money lighter the cure of it. The only remedy for that mischief, as well as a great many others, is the putting an end to the passing of clipped money by tale, as if it were lawful coin”

To Lowndes's doctrine, that raising the coin by making it more in tale would make it more abundant for general use, Locke says—

“Just as the boy cut his leather into five quarters, as he called them, to cover his ball, when cut into four quarters it fell short: but after all his pains, as much of his ball lay bare as before: if the quantity of coined silver employed in England fall short the arbitrary denomination of a greater number of pence given to it, or which is all one, to the several coined pieces of it, will not make it commensurate to the size of our trade, or the greatness of our occasions. This is as certain as if the quantity of a board which is to stop a leak fifteen inches square, be but twelve inches square, it will not be made to do it by being measured by a foot which is divided into fifteen inches instead of twelve, and so having a larger tale, or number of inches in denomination, given to it

“This, indeed, would be a convincing reason if sounds would give weight to silver, and the noise of a greater number of pence (less in quantity proportionably as they are more in number) were a larger supply of money”

“The necessity of trust and bartering is one of the many inconveniences springing from the want of money. This inconvenience, the multiplying arbitrary denominations, will no more supply, nor any ways make our scarcity of coin commensurate to the need there is of it, than if the cloth which was provided for clothing the army falling short, one should hope to make it commensurate to that need there is of it, by measuring it by a yard one-fifth shorter than the standard, or changing the standard of the yard, and so getting the full denomination of yards, necessary according to the present measure. For this is all that will be done by raising our coin as is proposed. All that it amounts to is no more but this, viz., That each piece, and consequently our whole stock of money, should be measured and denominated by a penny one-fifth less than the standard

“The increase of denomination does or can do nothing in the case, for it is silver by its quantity and not denomination, that is the price of things and measure of commerce : and it is the weight of silver in it, and not the name of the pieces, that men estimate commodities by, and exchange them for

“If this be not so, when the necessity of our affairs abroad, or ill husbandry at home, has carried away half our treasure, and a moiety of our money is gone out of England : it is but to issue a proclamation that a penny shall go for twopence, sixpence for a shilling, half-a-crown for a crown, &c., and immediately, without any more ado, we are as rich as before. And when half the remainder is gone, it is but doing the same thing again, and raising the denomination anew, and we are where we were, and so on : whereby supposing the denomination raised 15-16, every man will be as rich with an ounce of silver in his purse, as he was before when he had 16 ounces there, and in as great plenty of money, able to carry on his trade without bartering : his silver, by this short way of raising, being changed into the value of gold : for when silver will buy 16 times as much wine, oil, and bread, &c., to-day as it would yesterday, (all other things remaining the same but the denomination) it hath the real worth of gold

“This, I guess, everybody sees cannot be so, and yet this must be so, if it be true that raising the denomination one-fifth can supply the want, or one jot raise the value of silver in respect

of other commodities, *i.e.*, make a less quantity of corn, oil, and cloth, and all other commodities than it would yesterday, and thereby remove the necessity of bartering. For if raising the denomination can thus raise the value of coin in exchange for other commodities, one-fifth, by the same reason it can raise it two-fifths, and afterwards three-fifths, and as much further as you please. So that by this admirable continuance of raising our coin we shall be rich, and as well able to support the charge of the Government, and carry on our trade without bartering, or any other inconvenience for want of money, with 60,000 ounces of coined silver in England, as if we had six or 60 millions. If this be not so, I desire any one to show me why the same way of raising the denomination, which can raise the value of money in respect of other commodities, one-fifth, cannot when you please, raise it another fifth, and so on? I beg to be told where it must stop, and why at such a degree without being able to go further.

“It must be here taken notice of, that the raising I speak of here is the raising of the value of our coin in respect of other commodities (as I call it all along), in contradistinction to raising the denomination. The confounding of these in discourses concerning money is one great cause, I suspect, that this matter is so little understood, and so often talked of with so little information of the hearers.

“A penny is a denomination no more belonging to eight than to eighty, or to one single grain of silver: and so it is necessary that there should be sixty such pence, no more nor less, in an ounce of silver, *i.e.*, twelve in a piece called a shilling, and sixty in a piece called a crown: such-like divisions being only extrinsical denominations are everywhere perfectly arbitrary. For here in England there might as well have been twelve shillings in a penny, as twelve pence in a shilling, *i.e.*, the denomination of the less pence might have been a shilling and of the bigger a penny. Again the shilling might have been coined ten times as big as the penny, and the crown ten times as big as the shilling: whereby the shilling would have but tenpence in it, and the crown one hundred. But this, however ordered, alters not one jot the value of the ounce of silver in respect of other things, any more than it does its weight. This raising being but giving of names at pleasure to aliquot

parts of any piece, viz.: that now the 60th part of an ounce of silver shall be called a penny, and to-morrow that the 75th part of an ounce shall be called a penny, may be done with what increase you please. And thus it may be ordered by a proclamation that a shilling shall go for twenty-four pence, and a half-crown for sixty instead of thirty pence, and so of the rest. But that a half-crown should be worth, or contain sixty of such pence, as the pence were before the change of denomination was made, that no power on earth could do. Nor can any power but that which can make the plenty or scarcity of commodities, raise the value of our money their double in respect of other commodities, and make that the same piece or quantity of silver, under a double denomination, shall purchase double the quantity of pepper, wine, or lead, an instant after such a proclamation to what it would do an instant before. If this could be, we might, as every one sees, raise silver to the value of gold, and make ourselves as rich as we pleased. But it is but going to market with an ounce of silver of one hundred and twenty pence to be convinced that it will purchase no more than an ounce of sixty pence: and the ringing of the piece will as soon purchase more commodities as its change of denomination, and the multiplied name of pence, when it is called six score instead of sixty”

It may, perhaps, appear to some that the arguments put forward by Locke are so simple and convincing that it is almost a waste of ingenuity and labor to dwell upon them at such length. But, unfortunately, it is not so. The confusion of idea between the **Name** and the **Value** of a Coin is one which is but too prevalent at the present day. It seems almost incredible that an able man like Mr. Lowndes could perceive that debasing the standard of the Coin by putting less silver and more alloy was a public fraud and an injury to all creditors, and yet that he should be totally incapable of perceiving that raising the denomination of the coin was exactly the same thing as debasing the standard. In each case the quantity of fine silver in a crown or a shilling was diminished. Nevertheless, this fallacy is deeply seated at the present day, and is exactly the one which possesses the Bimetallists.

Parliament met in November, 1695, and in the speech from the throne the King called the attention of the House to the bad

state of the Coin, and requested them to devise a remedy. The House lost no time in taking the subject into consideration. The motion for recoinage was carried by a majority of sixty. The next question was whether the several denominations of the new money should have the same weight and fineness as the old? or whether the standard should be raised? This question produced many debates. The opposition adopted Lowndes's ideas that the price of an ounce of silver had risen to 6s. 3d., and therefore that the standard should be raised accordingly. The Government adopted the arguments so admirably set forth by Locke, and moved—*“That the House would not depart from the ancient standard either in Weight, Fineness, or Denomination.”* This resolution was carried by 224 to 114

The House thus adopted part of Locke's doctrines. But unfortunately they did not adopt his other two recommendations. Lord Somers proposed in the Council that a proclamation should be issued to make money current by weight and not by tale. The King was also of this opinion, but the rest of the Council were unanimously against it: by refusing to adopt Locke's advice on this point the Council cost the nation above a million: because when the people saw that the clipped money would still be received by tale, the clipping went on worse than ever

Neither had the House the boldness to adopt the doctrine of Petty and Locke, that a single metal should be selected for the standard coin, and perhaps it was fortunate that they did not, because if they had, the metal selected would undoubtedly have been Silver; and then we might have been troubled to this day with a huge silver currency of crown pieces, as the French are with their five franc pieces

The great recoinage then was effected: but as soon as the new Coin was issued from the Mint, it was hoarded, or exported to purchase gold which at this time was very profitable. The House then began a most useless and ineffectual meddling with the price of guineas. As long as the silver coinage continued in its debased state no human power could lower the price of guineas; as soon as the silver coin was reformed no human power could prevent them from falling. Montagu on this occasion deserted the lessons of his great master, Locke. If an Act of Parliament could alter the

price of guineas—where was the use of the recoinage? If the recoinage would effect the purpose—where was the use of the Act of Parliament? On the 15th of February, 1696, it was resolved that guineas should not pass for more than 28s.: on the 28th, it was resolved that after the 25th of March, they should be reduced to 26s. On the 26th of March it was resolved that after the 10th of April they should be reduced to 22s., and heavy penalties were enacted against all persons who should deal in them at higher rates after that date. But still the gold and silver Coin were wrongly rated: all the best and heaviest silver coins were culled out and exported to Holland, where gold might be purchased at a great profit

In 1707 the Union of the Kingdoms necessitated a new coinage. But the same disturbances immediately reappeared. The new silver coins immediately disappeared, and men's ideas began to be transferred to gold as the standard coin. In 1708 the Government offered a premium of  $2\frac{1}{2}d.$  an ounce to every one who brought foreign silver coin, or plate of any sort of standard fineness to the Mint to be coined. At last the Government in utter perplexity, and seemingly being the very last to be informed of the truth, which had now become common knowledge to every one of intelligence, that coins of two metals cannot circulate together in unlimited quantities, referred the whole matter to Sir Isaac Newton, the Master of the Mint

### Sir Isaac Newton on the Coinage

Sir Isaac Newton said in his Report<sup>1</sup>—

“That a pound weight Troy of Gold, 11 ozs. fine, and 1 oz. alloy, is cut into  $44\frac{1}{2}$  guineas: and a pound weight of silver 11 ozs. and 2 dwts. fine and 2 dwts. alloy, is cut into 62 shillings: and according to this rate a pound weight of fine gold is worth 15 pounds weight, 6 ozs. 17 dwts. and 5 grs. of fine silver, reckoning a guinea at £1 1s. 6d. in silver money. But silver in bullion exportable is usually worth 2d. or 3d. per ounce more than in coin: and if as a medium such bullion of standard alloy be valued at 5s.  $4\frac{1}{2}d.$  per ounce, a pound weight of fine gold will

<sup>1</sup> *Parliamentary History*, Vol. VII., 526

be worth but 14 lbs. 11 ozs. 12 dwts. 9 grs. of fine silver in bullion : and at this rate a guinea is worth but so much silver as would make 20s. 8d."

Newton then details the Mint rating of Gold and Silver in various countries. In Spain and Portugal the ratio of Gold to Silver was 16 to 1. This high price kept the gold in these countries, and carried away their silver to all Europe. So that all payments at home are made in gold, and silver usually bears a premium of 6 per cent.

In France the ratio of Gold to Silver was 15 to 1

In Holland, Hungary, and the Empire, a guinea would be worth 20s.  $7\frac{1}{2}d.$  at their Mint rating

According to the rates of gold and silver in Italy, Germany, Poland, Denmark and Sweden, the guinea was worth 20s. and 7d., 6d., 5d., or 4d. In Sweden it is lower in proportion to silver than in any other country, hence silver prevailed there

In China and Japan the ratio of gold to silver was only 9 or 10 to 1, and in the East Indies 12 to 1 : this low price of gold in those countries carried away the silver from all Europe

By the course of trade and exchange between nation and nation in all Europe gold was to silver as  $14\frac{4}{5}$  or 15 to 1 ; and at that rate a guinea was worth 20s. 5d. to 20s.  $8\frac{1}{2}d.$  And experience and reasoning showed that silver flows from those places where it was lowest in proportion to gold as from Spain [and England] to all Europe, and from all Europe to the East Indies, China and Japan : and that gold is most plentiful in those places in which its value is highest in proportion to silver, as in Spain and England

"It was the demand for exportation which had raised the price of exportable silver about 2d. or 3d. in the ounce above that of silver in coin, and had thereby created a temptation to export or melt down the silver coin rather than give 2d. or 3d. more for foreign silver : and the demand for exportation arises from the higher price of silver in other places in proportion to silver, and therefore may be diminished by lowering the value of gold in proportion to silver. If gold in England, or silver in East India, could be brought down so low as to bear the same proportion to one another in both places, there would be here no



greater demand for silver than for gold to be exported to India. And if gold were lowered only so as to have the same proportion to the silver money in England, which it hath to silver in the rest of Europe, there would be no temptation to export silver rather than gold to any other part of Europe. And to compass this last there seems nothing more requisite than to take off about 10*d.* or 12*d.* from the guinea: so that gold may bear the same proportion to the silver money in England which it ought to do by the course of trade and exchange in Europe. But if only 6*d.* were taken off at present, it would diminish the temptation to export, or melt down the silver coin. And by the effects, would show hereafter better than can appear at present, what further reduction would be most convenient for the public."

In pursuance of Newton's recommendation, a proclamation was issued in December, 1717, reducing the guinea to 21*s.*, and then in the language of the Mint the price of gold was fixed at £3 17*s.* 10½*d.* the ounce, which is so sore a puzzle to many people. This alteration in the value of guineas created some alarm, but in January, 1718, both Houses of Parliament passed resolutions that they would not alter the standard of the gold and silver coins of the realm in fineness, weight, or denomination.

We see that Newton gave no countenance to the doctrine of the modern Bimetallists, that fixing the ratio of the Coins by Law can regulate the relative value of gold and silver bullion. On the contrary, he shows that the Coins must follow the market value of bullion. No doubt the change he proposed in the rating of the Coins might have succeeded for a short time: but it would always have been a position of unstable equilibrium, liable to be upset by the first change in the market value of the metals, which was sure to occur in no very long time. But it did not come within his instructions to enter into such matters.

By the reduction of the price of the guinea the value of gold to silver was fixed at  $15\frac{1}{8}\frac{1}{4}\frac{2}{5}\frac{5}{8}$  to 1: but as in Holland and France the rate was  $14\frac{1}{2}$  to 1, a profit still remained of 4*d.* on each guinea on exporting silver and importing gold. By the Act of 1717 the guinea was for the first time made legal tender at 21*s.*, and as it was the cheaper medium in which to make payments, during the course of the last century it became an understood and

recognised custom of commerce that gold was the standard coin in which all Bills of Exchange and debts were payable. Hence this country has been practically a Gold Monometallic country since 1717, although Bimetallism still lingered on the statute book for another hundred years

The ablest writers on money had now fully adopted the doctrine of Petty and Locke, that only one metal should be adopted for the standard Coin. Harris says<sup>1</sup>—

“One only of these metals, that is, Gold or Silver, can be the Money, or standard measure of commerce in any country : for the standard measure must be invariable, and keep the same proportion of value in all its parts. Such is Silver with respect to Silver, and Gold to Gold. But Silver and Gold with respect to one another are like other commodities, variable in their value, according as the plenty of either may be increased or diminished : and an ounce of Gold, that is worth a given quantity of Silver to-day, may be worth more or less Silver a while hence. It is therefore impossible that both these metals can be a standard measure of the value of other things at the same time”

• *Lord Liverpool's Treatise on the Coins of the Realm* •

The Coinage continued to exhibit the same phenomena during the whole of the eighteenth century. Gold being overrated by *Ad.* in the guinea became more and more firmly established as the recognised standard coin ; all the best silver had long disappeared, and none but the most degraded remained in circulation

In 1798, in consequence of an address from the House of Commons, the then existing Committee of Council on Coins was dissolved, and a new Committee appointed, and Lord Liverpool, who had long paid much attention to the subject, was appointed Chairman, and drew up the report in the form of a letter to the King<sup>2</sup>

This work of Lord Liverpool's is the great master treatise on the subject, and as its principles were adopted at the great

<sup>1</sup>*Essay on Money and Coins*, Part I., ch. 2, sec. 7

<sup>2</sup>It was reprinted by the Bank of England, and published by Effingham Wilson in 1880

recoinage in 1817, when our present system was instituted, we shall give a brief analysis of it

Lord Liverpool commences his treatise by giving an account of the state of the Coinage in 1760, at the accession of George III. All the crown pieces and most of the half crowns coined by William III. had disappeared, and those which remained in circulation were degraded and clipped. The shillings and sixpences had lost almost every mark of impression, whether of head, reverse, inscription or graining

The heavy pieces had in general been melted down, or exported, and the rest diminished by wear and filing. Very little silver had been brought to the Mint to be coined, for according to the Mint ratio the value of Silver bullion compared to gold was lower than the market price

The state of the Gold Coin, though not so bad, was still deteriorating, and it became so bad in 1773 that it had become greatly deficient in weight, so that as soon as any new Gold Coin was issued from the Mint it was immediately melted down or exported. The foreign exchanges consequently rose greatly against the country: as all payments to these countries were enhanced in proportion to the deficiency in the Coin. Mr. Jenkinson, as Lord Liverpool was then, addressed a letter to the Chancellor of the Exchequer, suggesting that all the deficient Gold Coin should be called in and recoined: that after this had been done the Gold Coin should be current by weight as well as by tale, as had been the ancient custom, and that when the Gold Coin had become deficient by a certain amount it should cease to be legal tender. These proposals were carried into effect in 1774: and since then the gold coin had been preserved in a very perfect state

A difficulty then existed and continued to exist with respect to the Silver Coin, and until it was removed the Silver Coin could not be improved. The Mint ratio of Gold and Silver differed from their value in the market. As long as this difference existed both these metals would not be brought in sufficient quantity to the Mint to be coined: that metal only would be brought which was estimated at the lowest value with reference to the other: and Coins of both metals could not be sent into

circulation at the same time without a traffic of one sort of Coin against the other, by which traders in money would make great profit, to the great loss of the public : which would especially prevail in this country, where the Mintage of both metals was perfectly free, without any charge for seignorage, which was contrary to the practice of most other countries. To prevent this the standard Coin ought to be made of one metal only, and Coins of other metals should take their value with reference to this standard Coin, and be subservient to it. Lord Liverpool gives an account of the reasons for appointing the Committee of Council.

The Money or Coin of a country is the standard measure by which the value of all things bought and sold is regulated and ascertained : and it is itself at the same time the value, or equivalent, for which goods are exchanged, and in which contracts are generally made payable. In the last respect, money, as a measure, differs from all others : and it is to the combination of these two qualities which constitute the essence of Money, that the principal difficulties which attend it in theory and practice as a measure and an equivalent are to be ascribed. These two qualities can never perfectly unite and agree : for if Money were a measure only, and made, like all other measures of a material of little or no value, it would not answer the purpose of an equivalent. And if it is made in order to answer the purpose of an equivalent, of a material of value, subject to frequent variations, according to the price at which such material sells in the market, it fails on that account in the quality of a standard or measure, and will not continue to be perfectly uniform, and at all times the same

Coins made of Gold or Silver, or of any other metal, whether considered as a measure or an equivalent, are subject to the following imperfections

As each of these metals varies in its value with respect to other commodities for which it is exchanged, so it will vary for the same reason also in its value, in successive periods, even with respect to itself : and this variation is occasioned by the greater or less quantity that may happen to be at different times in the market, or in circulation. Any given quantity or weight of Gold

or Silver is at present of much less value than the same quantity or weight before the discovery of the mines of America. And if any commodity is either manufactured or produced at present in exactly the same quantity as it was in the reign of Henry VIII., when these mines were first discovered, and the demand for this commodity should be equal, a pound of Gold or Silver will not purchase as much of it now, as it would have purchased in the former period. Coins are on that account an imperfect measure, though they are made of one metal only

But if Coins are made of two of these metals, a second imperfection is then introduced: for any two of these metals, in successive periods, vary in value with respect to each other. The value of fine Gold, compared with that of fine silver, was rated in the 13rd of Elizabeth at less than 11 to 1, at the English Mint. But when Guineas were first coined in 1663, the value of fine Gold, compared with that of fine Silver, was rated at the English Mint at  $14\frac{3}{4}\frac{1}{2}$  to 1. Guineas were then coined as 20 Shilling pieces, and declared by the Mint Indenture to be current as such. They have since been made current by Proclamation as 21 Shilling pieces. The relative value, therefore, of fine Gold to fine Silver, in the Coins of this kingdom is now as  $15\frac{2}{3}\frac{5}{8}$  to 1. And in the Mints of several foreign countries, the value of Gold, compared with that of Silver, is rated still higher. These metals will also occasionally vary in their value, even at the same time, in different countries: and Exchange Brokers and many bankers are induced, on this account, to carry on a traffic in these metals; and in the Coins made of them, to their own profit; and to the loss of others

If the Sovereign takes upon himself to determine the rate or value at which Coins made of different metals shall at the same time pass in currency, a third imperfection is introduced into the system: for it is not possible that he should be able to pursue with sufficient accuracy the various fluctuations and changes that may in a short time happen in the relative values of these different metals. Their prices at the market will therefore frequently differ from the rate at which he has valued them in his Coins: and when Coins made of different metals are frequently legal tender, there will, of course, be two measures of property, differing

occasionally from each other. A profit will always in such case be made by those who traffic in Coins, by exchanging that Coin which has the least market value for that which has the greatest. The debtor will find it his interest to make his payments in the Coin made of that metal which is undervalued at the Mint: and such Coins as are made of the metal overvalued at the Mint will always be melted down and exported

Another imperfection arises from the gradual wear of the Coins made of either of these metals: for though the materials of which they are made are less subject to diminution by daily and common use than almost any other commodity, they are still subject to it in a certain degree from friction, and sometimes from other causes. If this diminution is considerable, the Money Jobber will avail himself of the inequality to which pieces of Coin of the same denomination are in this respect subject: he will collect and convert into Bullion the most weighty of them, and make a profit thereby: and those Coins only, which are less perfect, will be left in general circulation

Of the four imperfections before stated, the first which arises from the variation in the price, or Value, of any one metal in successive periods with respect to itself is so very inherent in the very subject that it does not admit of remedy: It produces, however, less inconvenience than either of the other three. It chiefly affects leases, contracts, and grants of long continuance [such as the Public Funds]. The other three imperfections may in some degree be remedied. Lord Liverpool then proceeds to explain the principles of the system of Coinage he recommended

The Money, or Coin, which is to be the principal measure of property ought to be made of **One** metal only. Such is the opinion of Sir William Petty, Mr. Locke, Mr. Harris, and of all the eminent writers on Coin. Petty says that *one* of the metals is the only fit matter for Money. Locke agrees, and says "that two metals such as Gold and Silver cannot be the measure of commerce both together in any country." These three authors assign their reasons in support of a principle in which they all concur: their reasons are in substance the same: and are so convincing that the truth of this principle can no longer be controverted

Certain, however, as the principle is, that the Money or Coins of any country which are to be the principle measure of property can be made of one metal only, the convenience of traffic necessarily requires that in rich and commercial countries there should be coins made of several metals adapted to the several sorts of purchases or exchanges for which they are intended. Coins made of Gold alone, or of Silver alone, in such countries, will not answer all the purposes of traffic. Coins of Gold are not well adapted for the retail trade, in which sort of traffic the greatest number of the subjects of every country are principally concerned: and coins of Silver are too bulky for larger payments, and are in that respect inconvenient. It is necessary, therefore, that in commercial countries there should be coins made of different metals, and if the coins which are the principal measure of property and instrument of commerce can only be made of one of these metals, the inferior coins made of other metals must be legal tender only in a limited degree as the Sovereign shall direct, and so far only they are the measure of property: and if they are accepted in payment of a larger sum with the consent of the receiver, as may some times be the case, they may then be said to be the representatives of the Coins which are the principle measure of property, and their value must be made to correspond with it as accurately as the nature of the subject will admit. It is by adopting this rule or principle that the second and third of the imperfections before stated will be avoided, or at least the ill effects resulting from them will be diminished as much as possible. But absolute perfection and complete accuracy cannot in the nature of things be attained

Mr. Locke, who thought that Silver coins were the only Money of account, or measures of property, was of opinion that Coins of Gold might be left to take their rate or value according to the relative price of Gold to Silver in the market, but experience had shown that this plan did not answer. Mr. Harris differed in this respect from the opinion of Mr. Locke, and held that the value or relation of the Coins to each other should be fixed by law and experience, and the practice of all governments in every age had shown the necessity of this

The Coins of every kingdom or state are the measure of

property and commerce within every such kingdom or state, according to the nominal value declared and authorised by the Sovereign, as far as they are made legal tender

In exchanges with foreign countries, and in payments made to them, the market value of the metal of which the Coin is made is the only measure of property and commerce : because the authority of Sovereigns cannot extend to regulate payments in foreign countries where they have no power of jurisdiction

The Sovereigns of the kingdoms and states in Europe had exercised from time immemorial the right of declaring at what rate or value the Coins of every denomination current in their dominions should pass and become legal tender. This right had been exercised by the Kings of this realm in two ways—

First by their Mint indentures, in which it was declared at what rate, or nominal value, the coins should be current

Secondly by proclamation

This great prerogative, however, is of so important and delicate a nature, that it ought to be exercised with the greatest judgment and discretion. Very serious evils had been caused by its abuse of which Parliament had frequently complained. This prerogative should always be exercised with the wisdom and support of Parliament. Lord Liverpool then gives details of how this prerogative had been exercised in England

He then says that coins may be debased in three ways—

1. By diminishing the quantity or weight of the metal of a certain standard of which any Coin of a given denomination is made

2. By raising the nominal value of the Coins of a given weight, and made of a certain standard : that is, by making them current, or legal tender, at a higher rate than that at which they passed before

3. By lowering the standard or fineness of the metal of which coins of a given weight and denomination are made : that is, by diminishing the quantity of pure metal, and proportionally increasing the quantity of alloy

Of the first method nine debasements had been made in the weight of the metal since William I. The first was done by



Edward I., in the 28th year of his reign, and the last was done in the 43rd year of Queen Elizabeth. By these successive debasements, the number of pennies struck out of the pound weight of silver had been increased from 240 in the reign of William I. to 744. By this means the Mint Price of Silver, which was originally £1, had now become £3 2s., and the value of the Pound in tale was diminished in the ratio of 32 to 93

The second method of debasement was chiefly practised on the Gold Coins, sometimes by diminishing the weight of fine gold in the Coin, and more frequently by raising the nominal value of the Coins, with the intention of preserving a proportionate value between the Coins according to the relative value of Gold and Silver in the market at each period. Lord Liverpool then gives details of the alterations in weight and rating, which had taken place in the Gold Coins, and also the variations which had taken place in the market value of Gold and Silver. He then describes the confusion and disturbance which had been caused by these changes in the value of the Coins

Lord Liverpool then describes the debasement of the Coins by diminishing their purity in the reigns of Henry VII. and Edward VI., but as these were merely temporary, we need not further notice them

Lord Liverpool then having given a long and intricate account of the principles upon which the Coinage of this country had been based for several centuries, and the inevitable and irremediable evils which had been produced by it, proceeds to lay down the principles upon which, in his opinion, the system of Coinage should be based

1. I will endeavor to prove that the Coins which are to be the principal measure of property ought to be made of one metal only.

2. I will show of what metal the Coins of this Kingdom, which are to be the principal measure of property, ought to be made

3. I will show upon what principles the Coins of the other metals ought to be made

The first of these propositions had been demonstrated by Sir William Petty, Mr. Locke, and Mr. Harris, and the reasons

upon which they came to this conclusion were too well founded to be shaken

In the earlier periods of our history, when only Silver Coins were current, there was no occasion to advert to this principle. But when Gold Coins were introduced, the Sovereigns of this country endeavored to regulate the rate at which these Gold Coins should be current, according to the relative value at which Gold and Silver Bullion in each respective period sold at the market. There was indeed less difficulty in those times in preserving the relative value of the Gold and Silver Coins according to the price of those precious metals in the market than at present : for before the discovery of the mines of America, the relative value of Gold and Silver fluctuated in a less degree than in later times. Gold Coins then constituted but a small part of the currency of the kingdom : the commerce of the country with foreign nations was much less extensive than it has become in the two last centuries : so that the circulation of our Coins was confined, in a great measure, within the kingdom, where the authority of the Sovereign in giving a nominal value to the Coins had a greater influence, and was more readily and correctly obeyed. In those early times the traffic in exchanges with foreign nations was not much practised or well understood

But in the reign of James I. the evils resulting from the fluctuations in the relative prices of the metals were felt in a most alarming degree. In the first year of his reign the complaints of the exportation of Gold Coin, on account of the low value at which Gold was estimated at the English Mint in comparison to Silver, were great and incessant. To remedy this evil the King raised the value of Gold in his Coins by successive proclamations, but at last he raised it too much : so that, during the remainder of his reign and the whole of that of Charles I., the Silver Coins were in their turn exported, and a very small portion of them remained in circulation. In 1663, when the relative value of Gold and Silver was re-estimated at the English Mint, Gold was underrated and all the Gold Coins then made would have been immediately exported, if the Government had obliged the people to receive them as legal tender at the nominal value of them in the Mint indentures. But Government allowed the Coins to be

received at the value which people set upon them, according to the relative price of Gold and Silver in the market. After the recoinage by William III., Gold Coins passed currently at a higher value than they were rated in the Mint indenture, or than the relative value of Gold and Silver would then justify : not by the authority of Government, but by the general consent of the people. The consequence was that the new Silver Coins began immediately to be melted down and exported. The same deficiency in the number and weight of the Silver Coins remained to that day

James I. consulted Bacon, Coke, and many other eminent men, but they were unable to devise a remedy for the evil. A posthumous treatise by Sir William Petty had been published in 1691, in which the true doctrine was first enunciated, suggesting the remedy so long sought for in vain. Locke and others supported him in this opinion : but this true principle, which solved the difficulty, had never yet been carried effectually into practice

During the whole of the period when our Coins were in so great a state of confusion, the commerce of the country had been constantly increasing, and the balance of trade was almost always in favor of the country. These evils did not spring from a want of the precious metals, but from a continual conflict between the Coins made of different metals : and this circumstance promoted the practice of melting down and exporting one or other sort of Coin, whenever the metal of which either of them was made happened to be underrated at the Mint, and a profit could be made thereby : a traffic from which the public derived no advantage, but suffered great loss : carried on by a class of men who were always preying upon the public, and therefore they ought to be discouraged as much as possible by every wise Government

The truth of the principle that the Coins, which are the principal measure of property, can be made of *one* metal only was further illustrated by the practice of Venice, Genoa, Amsterdam and Hamburg, which made all foreign and other bills, exoeeding a certain amount, payable only in Bank Money. These were small States, and were overrun with all sorts of foreign coins, ill

regulated and defective. To remedy this, these States formed Banks of Deposit. The managers of these Banks gave *recipisses*, receipts, or notes, in return for the Gold and Silver Bullion or Coins, considered as such, placed by individuals in their custody : or they gave them Credits in their books to the amount of the value thereof, with the right of transferring them

These receipts or notes, and this right of making transfers, called Bank Money, represented the Coins according to the standards of their respective Mints : they, therefore, retained a certain and undisputed value : and they became the fixed standard or measure, according to which mercantile payments were made

But in extensive Kingdoms, which are at the same time greatly commercial, no such system ever existed : nor would it be possible to carry such a system into execution. One Bank of this description would not be sufficient in such a country as Great Britain, and great inconveniences might result from the establishment of many in different parts of the Kingdom. The Coins of the Kingdom are therefore necessarily the principal measure of property, and the instruments of commerce : and from thence results the necessity in this country of having Coins made of one metal only, which should serve as an invariable measure for the purposes above mentioned : and for the same reason these Coins should be kept in the greatest possible perfection

It appears, therefore, not only from the clearest deduction of reason, and by the concurrent opinion of the most eminent writers, but by the evidence which long experience in this Kingdom afforded, to be a certain and incontrovertible principle that Coins, which are to be made the principal measure of property, can be made but of one metal only. The Coins made of other metals may be useful, and even necessary : but they must take their value and pass into currency, according to the rate, or value, given to them by the Sovereign with reference to that Coin, which is the principal measure of property, that is of the standard Coin.

It being then established that the Coins, which are to be the principal measure of property, can only be made of one metal, the next point to be considered is, which metal is it to be. Mr. Locke and Mr. Harris held that Silver should be that metal. But

Sir William Petty, who was more a man of business and of the world than either of these two, acknowledges that, as matters then stood, Silver was the matter of Money. But he expresses a doubt whether in that sense there was any such Money or rule in the world. He judged rightly. It is certain that the Governments of Europe have not in general paid attention to this rule : nor is it surprising that persons wholly occupied in official business should not have had leisure to study and understand so abstruse and complicated a subject

As a matter of Law, Gold and Silver Coins had been for several centuries equally legal tender : but as a matter of fact, ever since the recoinage by William III., people had preferred Gold Coins even at value exceeding their market value, either from motives of convenience, or from some other motive. Whatever the motive was, the fact was certain. It was equally certain that a great part of the perfect Silver Coins, which had been so lately issued in great plenty, had disappeared, and were either melted down or exported. The Gold Coins, then, from that time were in fact preferred, and became the measure of property in the opinion and practice of the people

In 1717 the rate of value of the Gold Coins was fixed by proclamation : the Mint indenture was altered in conformity with the proclamation : the Guinea was ordered to pass for 21s., and the other Gold Coins in proportion. They have since continued to be current and legal tender at that rate, though it was higher than their market value compared with the perfect Silver Coins. Before that time great payments had frequently been made to the Exchequer in bags of Silver, as they were then made in some foreign countries, but since that time no considerable payments had been made either at the Exchequer, or to individuals, in Silver Coins : the only use in which they had since then been employed was in payments for small sums, or as change for Gold Coins. The Silver Coins have, therefore, become subservient to the Gold Coins : and the Gold Coins had then become in the practice and opinion of the people the principal measure of property

Mr. Lowndes himself acknowledged that great contentions daily arose in all fairs, markets, shops, and other places throughout

the kingdom, to the disturbance of the public peace, in consequence of the defective state of the Silver Coins. That trade was on that account greatly lessened: that persons, before they concluded any bargains, were under the necessity of settling the price or value of the very money they were to receive for their goods, and they set a price upon their goods accordingly. These practices had been one great cause of raising the price, not only of all merchandize, but of every article necessary for the sustenance of the people. The receipt and collection of the public taxes, revenues and debts were greatly retarded. The cause of these evils was clear. The Silver Coins, which were then the principal measure of property, were greatly deficient: every commodity then rose in its value in proportion to this deficiency: they all took their value in reference to the Silver Coins. But none of these evils had happened for many years past, in consequence of the existing defect of our Silver Coins. There is no reason to suppose that any commodity has on this account risen in its price, or value. The reason was that the practice and opinion of the people had changed with reference to the principal measure of property. The Silver Coins had ceased to be the principal measure of property. All commodities now take their price, or value, in reference to the Gold Coins. For this reason, the present deficiency of the Silver Coins has no effect on the price of commodities. It is clear, therefore, that in the practice and opinion of the people, the Gold Coins had become the principal measure of property.

The foregoing facts clearly proved the opinion of the people of Great Britain in their interior commerce and domestic concerns. The opinion of foreign nations was exactly the same. In the reign of William III., the exchanges with the Low Countries had fallen so much that persons lost 1s. in the Pound on all remittances there: the exchanges with Hamburg and the East were lower still: and even worse to all the countries in the Mediterranean. The most favorable of our exchanges was 20 per cent. against the country. These facts were confirmed by the most eminent writers on Exchanges. Foreigners at that time considered the Silver Coins then very defective, as the principal measure of property and of foreign commerce, and they rated their Exchanges

accordingly. But these evils had ceased since 1717, though the Silver Coins continued to be very defective. But the exchanges were very adverse to us when the Gold Coins had become deficient. This was the cause of the great recoinage in 1774. But since the recoinage, the exchanges had been rectified

For many years previous to the recoinage in 1744, Gold Bullion had been higher than its Mint Price. It was sometimes as high as £4 the ounce. From 1757 to 1773 its average price was £3 19s. 2½*d.* per ounce, or 1s. 4½*d.* above the Mint Price. But immediately after the recoinage Gold Bullion fell below the Mint Price. For 20 years previous to 1797 the Bank paid for it, on an average, not more than £3 17s. 7½*d.*, or 2½*d.* under the Mint Price. The condition of the Gold Coins also affected the price of Silver Bullion. Neither before nor after the recoinage was the price of Silver Bullion affected by the bad state of the Silver Coin. From which it is clear that the price of Gold and Silver Bullion had for 40 years been estimated by the state of the Gold Coin only, and not that of the Silver Coin. Thus, in the opinion of the dealers in the precious metals, the Gold Coin was the principal measure of property and the instrument of commerce. Thus foreign merchants concurred with the people of this country in considering the Gold Coins as the standard measure of property

All these reasons, as well as others, showed that Gold ought to be adopted as the single metal of the standard Coin : and that the Gold Coin should be coined free from any seignorage, or charge, as it had been since 1663, in unlimited quantities

Where the function of Gold Coin ceases that of Silver Coin should begin : and where the function of Silver ceases that of Copper should begin

The suggestions of Lord Liverpool could not be carried out in 1805, as payments in cash by the Bank of England were at that time suspended. But we shall now see how his Treatise was received in India, which was at that time greatly disturbed by a multiplicity of Gold Coins and Silver Coins, whose value was constantly fluctuating : and the East India Company had endeavored to introduce Bimetallism into India, which turned out a signal failure

### Bimetalism in India

We have now to recount the attempt of the East India Company to establish and maintain Bimetalism in India, and its hopeless failure

The original standard money throughout India before the Mahommedan conquest was gold, with copper for small change. The Mahommedans never conquered Southern India, so Gold and Copper continued to be the standard money in Southern India until 1818

The Silver rupee was first coined in 1542 by Sher Shah, who usurped the throne of Babar. This coin weighed 174·4 grains Troy, and was nearly pure silver, and it retained its purity till 1772

Akbar the Great remodelled the Gold Coinage. His Gold Mohur was 170·5 grains, and nearly pure gold: this Coin was preserved until the extinction of the Mogul dynasty

In process of time the Silver rupee came to be held as the standard coin in Northern India, and the Gold Coins passed at such values as the parties agreed upon

✓ This having been found inconvenient, the East India Company, 1766, endeavoured to establish Bimetalism, or a fixed legal ratio between the Gold and Silver Coins. They struck a Gold Mohur, and ordered it to pass current for 14 sicca rupees. But as the Coin was much below the value of the silver in the rupees according to the market value of gold and silver, it was found impossible to get it into circulation. It was accordingly called in, and in 1769 a new Gold Mohur was issued, and ordered to pass current for 16 sicca rupees. But this new coin was not a success, and had very little circulation beyond Calcutta. The Company being in great perplexity at the disorder of their coinage, sought the advice of Sir James Steuart, who had the greatest reputation as an Economist in England, before the publication of Adam Smith's *Wealth of Nations* in 1776

Sir James Steuart accordingly drew up a treatise for them on the subject<sup>1</sup>

<sup>1</sup> *The principles of Money applied to the present state of the Coin of Bengal.* 1772



He speaks of the abuse of giving Coins denominations above their market value. From the earliest times the equivalent of commodities was reckoned by the weight and purity of the metal : and it was not till modern times that Princes attempted to set an arbitrary value on the Coin by denomination (?). This stamp was originally intended to certify the weight and the fineness of the Coin, and it was a great abuse to find Coins bearing the same name while their weight differed

To reduce the Winchester bushel to a drinking glass, and to call a glass of wine a bushel of wine is not more absurd than to call that a pound which does not weigh an ounce. It is from this that the science of Money has become so intricate

All the qualities which make the precious metals so desirable for equivalents have been defeated by giving them denominations which had no reference to their weights : by dividing the same species into different masses of the same value, as well as into equal masses of different values. If we restore the metals to their primitive functions the subject of Money becomes quite simple

By Coin Sir J. Steuart meant pieces of Gold and Silver of a definite weight and fineness. Worn out and degraded Coin ought to be called Bullion and not Coin

By Money Sir J. Steuart meant only the denomination which determined a proportion of value. What Sir J. Steuart means by denomination is often termed "Money of account." Thus accounts in this country have always been kept in "Pounds" : but the actual Coins were an infinity of gold and silver coins. So an account of so many "pounds" would in the last century have been paid in Bank Notes, guineas, silver and copper. The "pounds" expressed in a Bank Note, a bill, or bond are denominations of money, but they are not Coins any more than they are bullion

The use of Money is to value goods : and it consists merely of denominations which keep as exact a proportion as numbers do. The next thing is to ascertain the exact value of these denominations, which is the function of Coins

Coins consist of pieces of gold and silver, whose weights and fineness must be as exact in their proportions as the denominations of money. But Coins which lose their weight and fineness become bullion

But if the denomination of the Coin be changed without any alteration in its weight and fineness, then the value of the denomination is changed, but not the value of the Coin. As long therefore as such pieces of Gold and Silver preserve their weight and fineness, they ought to have the same denomination, and pass current according to their denomination as material money. If these principles are adhered to, the value of the money and of coin will remain as invariable as the nature of the metals will permit.

The expense of coining naturally adds a value to the Coins beyond that of the metal, and this value is in many cases arbitrary.

But the greatest defect of material money arises from the rivalry of the metals themselves. They have been adopted equally as a medium of commerce, or as an adequate equivalent for everything that can be bought. And how can the value of the Coins remain stable while that of the metals varies?

It has long been the custom in India to coin gold and silver into pieces of the same weight and fineness, as for example rupees: and the gold rupee usually passed for 14 silver rupees: or the ratio of gold to silver was 1 to 14.

A master, say, gives his shroff a salary of 1,400 rupees: he may pay him in 1,400 silver rupees, or in 100 gold rupees. Now suppose that the price of gold rises in the market, and the gold rupee becomes equal to 15 rupees. The master then pays his shroff's salary in silver only. The shroff complains that he never receives gold. The master says that he promised to pay 1,400 rupees, and he does so: everyone paid him only in silver: and he can only pay in what he receives. Besides, what good would it do to pay in gold? Says the shroff, if he received payment in gold he would melt it down: and so with one gold rupee, he could buy 15 silver rupees in the market. So he lost 1 rupee for every 14 he got in silver coin. The master says it is roguery. No, the denominations of gold and silver coin should be in exact proportion to their market value as metals. Now the 14 silver rupees are no longer worth a gold rupee, when the gold melted down will buy 15 rupees. Thus both are losers, because silver rupees are no more of the same value as they were: and as they buy less gold, so they will buy less of other things. If one went

to market, things would cost less if paid in gold rather than in silver. Thus the change in the value throws the whole of business into confusion

Sir J. Stenart shows that if either gold or silver coin be made the standard, the other must be adjusted to it from time to time

From this it follows that in every country where revenues, salaries, bonds, and obligations are given, specified in one certain unit of money, it is of the greatest consequence that the standard unit should be preserved invariable

The Coins of a country may be changed when the market value of gold and silver changes: but in all such changes the denominations given to the new Coins must preserve an exact proportion of value to the standard unit of account by which accounts are kept. In Bengal the unit of account is the current rupee. To suffer this standard denomination to be valued by the accidental currency of any coin is contrary to principle. The current rupee, and not the sicca, in any coin whatever, must be the standard by which every Coin or currency is to be valued: and no precaution ought to be omitted to fix or ascertain its own value. By this standard all accounts are kept, and the value of all Coins ascertained at the Mints, and by the shroffs, and if one invariable standard be not found, what security is there for creditors and debtors?

Why does no nation keep their accounts in any specific coin? Neither the pound sterling, nor the denominations of other countries, nor the current rupee in Bengal are specific coins

The reason is, that however at the first establishment of any currency the capital or standard money of account may have been realized in a specific coin, yet the variations in the respective value of the metals has obliged all nations to depart from their first regulations

[But, we may add, a much more potent cause has been that in every State the Prince conceived that he had the right to diminish the weight, and debase the purity of the coin as much as he pleased, and still call the coin by the same name] .

Before the discovery of America, gold was seldom more than 10 or 11 times as valuable as silver: but when after that the

price of gold rose, Princes would not add a little more weight to their silver coin, as they ought to have done, bearing the denomination of their standard unit, or take some gold from the coins of equal denomination with the silver. The silver unit of the standard was therefore debased, which caused the melting down and exportation of the gold, which became underrated. Upon finding the gold become scarce, and coming no more to their Mint, to encourage its being brought in, they raised the denomination of the Coin, instead of taking a little from its weight

Raising the denomination of the Coin did not add to its market value : but it lowered the value of the *Denomination*

Sir J. Steuart did not perceive that diminishing the weight of the Coin, and retaining the same denomination was exactly the same principle as raising the denomination of the existing Coin : and that while the latter was a very simple process only requiring a Royal Proclamation, the former would have been a very slow and expensive process, necessitating the calling in and recoining of the whole of the gold money

When the value of gold rose, more silver ought to have been added to the silver coins. But as this was an expense to the Prince, he preferred to raise the denomination of the Gold Coins, and by this he debased the value of all his future revenues

By the high rating of the Gold Mohurs in Bengal in 1766, and by raising the denomination of the sunnat rupee in 1771, without adding one more grain weight to them, the value of the current rupee is debased, but the value of the gold and silver coin is not raised

The Gold Mohur of 1766 was not really worth more than  $11\frac{1}{2}$  sicca rupees : or 13·34 current rupees. But the mohur was raised to pass for 14 sicca rupees : so nobody would give 14 sicca rupees for this coin : and the silver all disappeared from circulation

But the Gold Mohur was reckoned in the Company's accounts for 14 sicca rupees : or 16·24 current rupees. Thus a Coin passed for 16·24 current rupees, which was really worth no more than 13·34. This was debasing the value of the current rupee, and diminishing the value of all the revenues of the Company

If a guinea were raised to £50, this would not add to the value of the guinea, but it would debase the pound sterling

By the regulations of 1771 the same operations were made on the Silver Coins : sunnat rupees were to be received as sicca rupees, so that 100 of these Coins which were now equal to 111 current rupees, were to pass for 116 rupees. This would cause a great loss to the Company's revenues, and the salaries of their servants.

Siccas, annas and pice were all denominations of weights. One sicca=16 annas=179·5511 grains Troy : and one anna=16 pice. The consequence of the multiplicity of the Coins and their differing degrees of fineness was that no one could tell the value of the Coins he possessed. No one could pay his rent without calling in the aid of the shroff. Nor could the Treasury determine the value of the Coins paid to it without the aid of a shroff.

In former times Gold Coins were left to find their market value with respect to silver. The Gold Rupee passed sometimes for 12, 13, 14, and even 15 silver rupees, which all proceeded from the variations in the value of the metals

But till 1766 no attempt had been made to fix a legal ratio between the Gold and Silver coins. The Gold Mohur had been coined of the same weight and fineness as the sicca rupee of Bengal

But complaints having been made that silver was exported to China, and great quantities of gold being then in Bengal, either in ornaments, or in Coin, or hoarded away, it was proposed as an expedient to augment the quantity of specie in currency, to make a coinage of gold, in which encouragement should be given to bring gold to the mint from its secret places, and from foreign countries.

But the Government did not consider that every encouragement given to Gold in preference to Silver occasioned the melting down and exportation of the Silver Coin. The only encouragement possible to be given to the Gold Coin was to rate it higher than the market value of the Silver Coin : *i.e.*, to overrate the Gold Coin in payment, so that every one should pay in Gold rather than in Silver. The consequence of the measures of the Government was to overrate the Gold Coin by  $17\frac{1}{2}$  per cent. The same doctrines were then current in England : the only effect of which was to debase the value of the Silver. In proportion as

we raise the denomination of a Coin above its market value we debase the value of such denomination, and promote the exportation of what is undervalued. If guineas were raised to 22 shillings in denomination: or if the Mint coined 46 guineas instead of  $44\frac{1}{2}$ , out of a pound of gold, this would debase the value of the pound sterling

The pound sterling would then be only worth  $\frac{22}{22\frac{1}{2}}$  of a guinea instead of  $\frac{20}{21}$ . By this means the Bank would gain  $\frac{1}{21}$  upon all guineas they might then have in their coffers. But, on the other hand, they lose  $\frac{1}{21}$  of the interest Government pays them on their stock: or £15,000 a year in perpetuity

These effects took place in Bengal. If the Gold Mohurs had been made legal tender at that rate, the whole Silver would have disappeared: and the current rupee would have drawn its value from the mohur (as the pound sterling now draws its value from the guinea) and consequently have lost  $17\frac{1}{2}$  per cent. of its value. Thus the Company must have lost every year for ever for the sake of making a present of  $17\frac{1}{2}$  per cent. to the shroffs upon the first issuing of the Coin

For a similar reason the pound sterling has been debased, first by allowing guineas to pass for 21s. which are worth no more than 20s. [20s. 8d.] in proportion to our sterling Silver Coin: and then by suffering light guineas, which are many of them worth only 18s. to pass for 21s. The similarity of circumstances in England and Bengal with respect to the over-rating of gold is a further apology for this monstrous abuse. One pound sterling in new guineas, if compared with our standard Silver Coin, has indeed lost only 5 per cent. The current rupee lost for a time  $17\frac{1}{2}$  per cent., but then the greatness of the loss roused the Indians and forced the Company to desist

The doctrines of Sir J. Stuart with respect to the attempt to maintain a fixed legal ratio between Gold and Silver Coins issued in unlimited quantities are admirable, and in entire agreement with those of Oresme, Copernicus, Gresham, Petty, and Locke: and as there is no reason to suppose that he was acquainted with their works, it shows that clear and powerful minds arguing on the same state of facts come to exactly

the same conclusions independently of each other. We cannot say the same of his proposed remedy that the Coins should be altered in their weights from time to time to meet the alterations in the market value of the metals. Such a plan is absolutely impracticable. It would possess no element of stability. Every change in the market value of the metals would require a fresh calling in and recoinage of the Coinage, at an expense and worry which no country could stand. All other remedies being exhausted, there is no resource but to adopt Petty and Locke's plan of Monometalism : and we conclude that Sir J. Steuart was not acquainted with Locke's treatise, because if he had been, so able and clear-sighted a man could not have failed to perceive that it is the only possible remedy in the case

In consequence of Sir J. Steuart's treatise, regulations were made in 1772 to make the gold mohurs receivable at the public treasuries, and in all public payments throughout the provinces, at the rate of 16 sicca rupees : to make them legal tender in all private transactions : and to impose a duty on all gold bullion sent to the Mint to be coined, so as to prevent too large a quantity of coin getting into circulation, and "to diminish the advantage derived from importing it in preference to silver

But still this was not satisfactory : and further regulations were made in 1773, saying that the principal districts in Bengal, Behar and Orissa, had each a distinct silver currency which was the standard in their respective districts : this caused great confusion and loss to the ryots. The regulation then enacted measures for superseding all other silver currency in Bengal by the nineteenth sun sicca rupee. The regulation then said that the rules by which the gold coin had been regulated had produced evils similar to those which prevailed with regard to the silver coin

The Government of the East India Company had good cause to complain of the multiplicity of the gold and silver coins that were in circulation, and the serious losses they sustained by their continual variations in value, as at that time there were 139 different kinds of gold mohurs : 61 different kinds of gold pagodas or huns : 24 different kinds of fanams : and 59 different kinds of foreign gold coin : also 556 different kinds of silver

rupees : and 155 different kinds of foreign silver coin in circulation in India : differing in weight and fineness. These vast numbers of coins were not attempted to be tied together by any fixed legal ratio : as indeed would have been obviously impossible, as they were issued by a multitude of independent princes, who claimed the right of coining, in the decadence of the Mogul Emperors, and if they had been so, the greater number would have disappeared from circulation. But they were continually varying in their market value : and consequently the difficulty of rating them in any system of accounts was enormous. In fact no one knew the value of the coins they possessed. All payments had to be made by the intervention of shroffs, which, of course, opened the door to abundance of fraud

The Government were still in a state of perplexity at the failure of their attempt to establish a fixed legal ratio between the coins of different metals—or in other words Bimetalism—when Lord Liverpool's *Treatise on the Coins of the realm* was published in 1805

*The Governor-General of India in Council utterly condemns  
Bimetalism*

Lord Liverpool's *Treatise on the Coins of the Realm* reached India in the beginning of 1806. At that time the Finances of the Government were greatly troubled by the fact that large amounts of Gold and Silver Coin were in circulation, whose relative value was constantly varying. The Governor-General in Council took the whole subject of the Coinage of India into consideration, and issued a Minute on the 25th of April, 1806, to the Governments of Madras and Bombay on the whole question.

We lay before our readers the part of this important Minute relating to Bimetalism in full, because it is of decisive weight, and it has never been made public before : and we are only enabled to do so by the courtesy of the India Office

The Minute begins by stating the serious losses which had been incurred by the different Presidencies in India from 1779 to



1802, in consequence of the circulation of so many denominations of Gold and Silver coins of different values in different districts. The losses from these circumstances had on investigation proved to have been far in excess of their expectation

They then enunciated a scheme for a uniform system of Gold and Silver Coinage throughout their whole possessions

We now give the part of the Minute relating to Bimetallism *verbatim*

“In the prosecution of our inquiries we have referred to a Letter from the Earl of Liverpool to the King on the Coins of the Realm (lately published), copies of which we transmit with the present despatch. We think his Lordship has established the principle that the ‘Money or Coin which is to be the principal measure of property ought to be of one metal only.’ In applying this argument to a Coin for general use in India, there cannot be a doubt, in our opinion, that such Coin must be of Silver”

Then follow details of the new system of Coinage proposed, which we omit, as not affecting the general principle of the question. They then continue—

“It is our opinion, supported by the best authorities, and proved by experience, that Coins of Gold and Silver cannot circulate as legal tenders of payment at fixed relative values as in England and in India, without great loss: this loss is occasioned by the fluctuating value of the metals of which the Coins are formed. A proportion between the Gold and Silver Coins is fixed by law, *according to the Value of the Metals*, and it may be on the justest principles: but, owing to a change of circumstances, Gold may become of greater Value in relation to Silver than at the time the proportion was fixed: it, therefore, becomes profitable to exchange Silver for Gold, so the coin of that metal is withdrawn from circulation: and if Silver should increase in its value in relation to Gold, the same circumstances would tend to reduce the quantity of Silver coin in circulation. *As it is impossible to prevent the fluctuation in the value of the metals, so it is equally impracticable to prevent the consequences thereof on the Coins made from these metals*

From these circumstances the Coin of England has been much

disordered, and the papers referred to have plainly shown the losses and inconveniences experienced in India from similar causes. The loss in Bengal was certainly enhanced by giving to the Gold Coin at the period of its issue an improper Value in relation to the Silver Coin. Loss and inconvenience have been occasioned at Madras by the contrary error, where the Silver Coin was rated at too high a Value in relation to the Gold Coin. *But there is a radical defect in the principle itself of giving a fixed value to metals in Coin, that are in their nature subject to continual change:* because the metals being articles of commerce, their value will fluctuate with the demand. Had the nicest proportion been fixed between the Gold and Silver Coins of Bengal and Madras at the time of their issue, yet the first alteration in the price of the metals would have occasioned the *Batta* (premium) so much complained of, though such *Batta* had not existed before. The alteration in the value of the metals in Europe has been the principal cause of the present state of the English Silver Currency: a debased and counterfeit money having been introduced into circulation, which does not possess above one-third of the intrinsic value of the legal Coin of the realm. To adjust the relative values of the Gold and Silver Coins according to the fluctuations in the value of the metals would create continual difficulties, and the establishment of such a principle would of itself tend to perpetuate the inconvenience and loss

“It is from a consideration of these circumstances that we have been induced to conclude that our Gold Coin should not be forced into circulation at a fixed value in regard to the Silver Coin, but left to find its own level according to the usefulness it may possess as a Coin, being issued according to the market value of the metals, and received by our officers in the same manner. From this regulation no other loss could be suffered by the Company or the Public than what might be occasioned by the varieties in the prices of the metals: and it is not to be apprehended that these prices could be materially affected by any artifice, or device, as there could not be a quantity of Gold Coin in circulation much beyond the wants of the community

“The contrary practice of forcing the Gold Coin into circulation, on the plea of a want of Silver Currency in Bengal, has had

the effect of reducing the value of the Gold Coin by its abundance beyond the difference in its real value, and increasing the Batta accordingly. We do not imagine that any very considerable quantity of Gold Coin will obtain circulation in Bengal, and although it has been alleged a Gold Coin is necessary to supply the place of the Silver Coin which frequently disappears almost as soon as issued, yet it must be remembered no regulation or expedient can be devised to keep the Coin in any country where the Balance of Trade is against it, and where to this principal cause of a deficiency in the Circulating Medium is added a prevailing disposition on the part of the people to hoard the Silver Coin : where these circumstances exist, all attempts to force a Gold Coin where Silver only is the common medium will be attended with loss and disappointment

“ We do not apprehend any difficulty can attend the introduction of a Gold Coin into Bengal, on the principle that it should pass at its market value in relation to Silver, without having any fixed relative value set upon it, neither are we aware of any impediment to the measure at Bombay. In respect to those countries under the Government of Madras, where Gold Coins are the principal Currency money of account, and the measure by which the pay of the troops is generally calculated, some further consideration appears necessary

“ We have before stated our opinion that Silver should be the universal money of account, and that all our public accounts should be kept in the same denomination of rupees, annas, and pice. The Committee of Reform recommended this plan for Madras, that their accounts might be assimilated as much as possible to the Government accounts of Bengal and Bombay

After some details of the new Coins to be issued, the Minute proceeds—

“ Our recommendation of the Gold Coin passing generally at its market price, the Silver Coin only being the measure of value, may, we conceive, be carried into effect with great facility, in consequence of both Coins possessing the same denomination, weight and fineness : as also being alike divided into halves and quarters. For an example, we have supposed variations may take place in the values of the metals from 14 to 1 to  $15\frac{1}{4}$  to 1, and it will

be seen that the value of any division of the Gold Rupee is found in rupees and annas, only on the presumption that the market values of the metals will not vary in proportions beyond or under one quarter

“ We have thus stated our opinion in the view of its being unnecessary to continue a fixed relative value between the Gold and Silver Coins : it appears to us no such necessity can exist in regard to Bengal and Bombay, and we hope no such measure will be found necessary at Madras : but should our Governments, who are assured by the most competent judges, be of opinion that local circumstances render it proper to fix a relative value between the Coins at Madras, the plan we have detailed seems capable of being carried into effect in this respect also with much ease. On the supposition of the quarter Gold Rupee supplying the place of the Star Pagoda, at the value of  $3\frac{1}{2}$  new rupees, the proportion of Gold to Silver is as 1 to 14, which is very near the proportion recommended from Madras of 1 to 14½.

“ Having stated our views concerning a general Currency for British India, we deem it unnecessary to make any observations on the advantages attending such a measure, as our Governments abroad, by constant experience of the manifold evils of the present system, are fully competent to appreciate the benefits that would result from the adoption of a plan whereby a Coin of one standard weight and fineness would become exclusively current as the general measure of value ”

### *Resolutions of Parliament as to the Silver Coinage*

On the 30th May, 1816, Mr. Wellesley Pole, Master of the Mint, moved resolutions in the House of Commons relating to the Silver Coinage, in answer to a message from the Prince Regent.

He said that the Exchanges were now in our favor, the high price of bullion which had existed during the war was now at an end, and the precious metals were now at their natural level. Silver was then rather under the Mint Price, and Gold very near it. It was therefore a fitting time to undertake a recoinage, and place it on such a footing as to enable us to return to a metallic Currency

The standard Coin of the realm, the measure of value, had originally been silver, but in course of time gold had been introduced as a convenient measure. As the use of gold coins had extended, the difficulty of regulating the relative price of the two metals to each other, as well as regulating the price of the Coins to their respective metals, began to be seriously felt, and many alterations had been made from time to time in the gold money in the hope of keeping the coins of both metals in circulation. The guinea, coined by Charles II. in 1663, was denominated a 20s. piece in the Mint indenture. But as Silver was then considered as the measure of value, the gold coins varied from the rate fixed by the Mint indenture, according to the price of Gold Bullion in the market. The effect of this was to drive the good heavy milled silver coins to the melting pot, and to encourage the clipping and defacing of the remaining Silver Coins. The commerce of the country was greatly disturbed in consequence. The true cause of this was attempting to make both coins equally current at a fixed legal ratio, while it was impossible to prevent their fluctuating in price, and so throwing the whole circulation of the country into confusion.

Experience showed that it was not expedient to allow Coins of both metals to be equally legal tender to an unlimited amount. It had become the opinion of all the eminent men who had recently written on the subject that there should be but one standard measure of value. Sir William Petty, Mr. Locke and Mr. Harris were agreed upon this. They all agreed that the standard money cannot be made of two metals whose value with respect to each other was constantly changing. Hence only one metal is fit to be made standard money and the measure of commerce. These opinions had been corroborated by Mr. Alcorn, Adam Smith, Lord Liverpool, and the Bullion Committee. All these authorities agreed that the standard measure of value and the standard coin of the realm should be of only one metal. He believed such to be the universal opinion.

There had been controversy as to which should be the standard metal. Locke and Harris were of opinion that silver should be the standard, but they gave no reason for it. But Lord Liverpool was in favor of gold, and he believed that if Locke had been

living then, he would, from the change of circumstances, have been of the same opinion. After the great recoinage by William III., gold had nearly driven silver out of circulation. The public considered both metals to be equally the standard coin of the realm ; but as the relative price of the metals was constantly changing, it was impossible that Coins of both metals should continue in circulation. The gold being overrated, the silver disappeared. All the distress and difficulty which had caused the great recoinage in 1695 reappeared. Sir Isaac Newton, to whom the matter was referred, showed that the legal ratio of gold to silver was too high, as compared with their market value throughout the world. At that time guineas were current at £1 1s. 6d. : but, according to the market value of the metals, the value of the guinea was only about one pound and sixpence or eightpence. Consequently he considered it was overrated by 10d. or a shilling. He, however, proposed that it should be lowered sixpence as an experiment, which was accordingly done in December, 1717. By this gold was for the first time made a legal measure of value. Except in the two Acts of Parliament in 1695, gold had been entirely neglected by the Government, and it had always been coined by the Mint indenture to represent a 20s. piece. But in 1718 it was rated at 21s. in the Mint indenture, and since then it had become in fact the standard measure of value, and has always been so considered, not only at home, but in the foreign exchanges, and the gold coins had never since fluctuated in price. Silver since then, instead of being the standard, had come to be considered merely as subordinate both at home and abroad. This was in effect changing the standard, and limiting it to a single metal. The silver coinage continued to disappear, and had never recovered the shock it received in 1717. From 1717 to the present time it had been found impracticable to attempt a silver coinage. The dread of the competition of the coins of the two metals, if they circulated together as the standard coin of the realm, and as equally legal tender to an unlimited amount, and the fate of the silver coinage of 1695, had deterred the Government from such an attempt, and during the whole of the century only £649,000 in silver had been coined, and in the fifty-six years of the present reign only

£64,500 had been coined. Thus it had become excluded from all large payments, and it was merely used as small change for the gold coins.

Gold having, in the opinion and practice of the public, become the standard measure of value, and all our exchanges being calculated by common consent with reference to the gold coins, they had become much deteriorated by 1773, and seriously affected the exchanges. All the old gold coin was called in and recoinced, and it was enacted that in future it should only be current by weight, and that if it had lost one grain of its weight it should cease to be current. The effect of this on the Exchanges was most beneficial. The Exchanges, which had been previously adverse, immediately turned in our favor. From this period till 1797 there had been little or no fluctuation in the price of gold, and all the previous inconveniences disappeared.

He therefore contended that gold was in fact the standard coin of the realm, and that it was fit that it should be so. That Parliament also held the same opinion was obvious, because as soon as the reform of the gold coin was completed in 1774, it was enacted that Silver should not be legal tender in coin, or by tale, for more than £25, and for all sums above that it was only to be tendered as bullion by weight at the rate of 5*s.* 2*d.* per ounce. This had been continued till 1798, when Lord Liverpool advised that the coining of silver should be prohibited until the whole subject was considered by a Committee of the Privy Council. An Act to that effect was passed.

Mr. Wellesley Pole then stated the principles upon which the new Coin was to be regulated. If gold was to be adopted as the sole legal standard Coin, silver might be coined of the established fineness, but a slight diminution might be made in their weight, so that it might not be exported. It might then be made, as Adam Smith had suggested, legal tender for not more than a guinea, in the same manner as copper was legal tender for not more than a shilling. If the pound Troy of silver was coined into 66*s.* instead of 62*s.*, and the difference between the two retained as a seignorage, he thought that such a coinage would answer all the purposes of change. This would raise the value of Coin above Bullion about  $\frac{1}{6}$  per cent.

Bullion must rise so much above the Mint price before Coin could be brought upon a par with it: this he hoped would be a sufficient protection to keep the Coin in circulation. Thus silver would circulate merely as small change for gold. He should propose to limit the legal tender of the new Silver Coin to two guineas. This, he conceived, would answer every purpose of convenience, and guard against the possibility of any traffic in the Coins of the different metals, be the price of bullion what it might. The seignorage of four shillings out of 66 would pay the expense of the coinage, which was estimated at  $2\frac{1}{2}$  per cent., and leave a profit to government of  $3\frac{1}{2}$  per cent.

The resolutions to that effect were then agreed to, and the same evening similar resolutions were agreed to by the House of Lords

In pursuance of these resolutions the great Recoinage Act Statute, 1816, chap. 68, was passed, which established our present system of Coinage, the triumphant success of which, while most other countries were disturbed by Coinage troubles, has proved itself to be the most perfect system of Coinage ever devised by the ingenuity of man

By this Act the Silver Coins were made legal tender for any sum not exceeding 40s.

The New Coinage was issued in 1817. The Coinage of guineas was discontinued, and Sovereigns of the value of 20s. were made the standard coin, and legal tender to an unlimited amount

### *Debate on Bimetallism in the House of Commons*

On the 8th of June, 1830, Mr. Attwood, who was famous for his Currency fads, brought forward a motion in the House of Commons to re-establish Bimetallism. Silver had then diminished in value about 5 per cent. from the Mint ratio in 1816, which was 1 to  $15\frac{1}{4}$ : in 1830 it was 1 to 16

Mr. Attwood made an immensely long speech, abounding with historical inaccuracies and misconceptions, containing nevertheless a certain modicum of truth. He fully admitted the Law of Gresham, that people always pay their debts in the cheapest



medium : and he stated that it was the express purpose of his motion to allow persons who had contracted their debts in Gold to pay them in Silver, which had diminished 5 per cent. in value. He moved that the Coinage should be restored to its old position in 1797—That it was expedient to repeal so much of the Act 56, Geo. III., c. 68, as declared Gold coins to be the only legal tender in payment of all sums beyond the amount of 40s., and to establish Gold and Silver coins of the realm, coined in the relative proportion of  $15\frac{2859}{13640}$  lbs. weight of sterling silver to 1 lb. of sterling gold, as legal tender for all money engagements, as directed and ordered by the proclamation of the 4th Geo. I.

Mr. Herries, the Master of the Mint, in the course of his reply, said that he would not detain the House with details upon a part of the question which did not call for them, but it would be sufficient to observe that it was perfectly well known that the proportion in which these two metals interchanged then in the market of the world was essentially different from the proportion of 1798. In fact the hon. gentleman had admitted this : nay, the hon. gentleman had gone further, and told them that the difference was as much as 5 per cent. This was not quite correct : the difference was not quite so great : but take it to be as the hon. gentleman had stated it, and to what result did it lead them ? Why the hon. gentleman, ingenious as he was—practical as he boasted himself to be—had gravely and seriously recommended that the Legislature should make Gold and Silver equally a legal tender at the old Mint prices, although in the very same breath he acknowledged that these metals differed in value from these prices as much as 5 per cent. *He would venture to say that such a proposal had never before been seriously made.* The hon. gentleman had with great pains and minuteness traced the history of our Currency, and had told them how our ancestors had been obliged from time to time to adjust the value of these two metals, in order to keep them both legal tenders. Indeed this was the whole object of Sir Isaac Newton's tables : but the hon. gentleman derided the wisdom of Sir Isaac Newton, and in defiance of all these facts, of which by his speech he had proved himself to be cognizant, not ignorant, he had said—"Let the two

metals be a common tender, and let the debtor pay in which he pleases . . .

“Suppose the resolution of the hon. gentleman to be agreed to, what would be the inevitable result? Why it would be proclaimed to-morrow from one end of the country to the other—he need not specify how—that this House had come to a resolution the effect of which might be shortly stated thus—namely, that every man who had claims payable on demand, every man who held notes of small or great value, every man who had debts outstanding, would, if he secured the amount of what was due to him before the resolution passed into Law, get the whole of his money: whereas, if he delayed beyond that period, he would only get £95 for every £100. It was terrible to reflect upon the consequences which must follow. What would become of the Bank of England—what would become of every banking house in the Kingdom—what would become of all debtors who were liable to pay upon demand all that they owed? *Would not all transactions of commerce be suspended, and the whole country present one continued scene of confusion, consternation, and ruin,* when the House of Commons proclaimed to all who had debts due to them, that if they did not collect them on the instant they would assuredly be losers to the amount of 5 per cent?” After replying at great length, Mr. Herries concluded by saying—“He could not consent to a motion which he felt would succeed, before the setting of the next sun, in creating a panic and confusion such as could not be described, and which it would then be too late to remedy”

Mr. Huskisson strongly opposed the motion: he said that “he entirely acquiesced in the opinion already given by the Master of the Mint, *as the measure would be productive of bankruptcy and ruin.* He altogether concurred with the Master of the Mint in thinking that *if the House agreed to this resolution to-night there would be a general panic among the people to-morrow, and that before the lapse of a week it was probable there would not be a sovereign remaining in the country*”

Sir Robert Peel thoroughly agreed with Mr. Herries and Mr. Huskisson! It was impossible that the scheme suggested could

be productive of any good whatever. . . . The proposition carried its own refutation on the face of it, for it could not be acted on before a month from the then time, so that the creditor might clearly take advantage of the interval. . . . *The notion of a double standard was totally fallacious*, and would be found impracticable in effect, nor had it ever for a moment been entertained by Mr. Locke nor any others who had advocated a silver standard. . . . If they were to act as the hon. gentleman recommended, in the event of a panic there would be a simultaneous call for gold . . . *all would turn to confusion, and public ruin must be the consequence*”

The motion was negatived without a division

Mr. Herries, Mr. Huskisson, and Sir Robert Peel were the three ablest financiers of the day. They lived at the time of the institution of our present system of Coinage, and they were perfectly aware of all the circumstances and reasonings which rendered the former system hopelessly impracticable, and which led to its abandonment

If they were unanimously agreed that an attempt to re-establish Bimetallism, when the diminution in the value of silver was only 5 per cent., would produce a national bankruptcy in 24 hours, what would be the result at the present day, when the diminution in the value of silver has nearly reached 50 per cent. already, with every prospect of its going still lower? At the present day debtors would be enabled to discharge their debts at the rate of about 10s. in the pound, and if Parliament gave signs of seriously intending that every debtor should be enabled to discharge his debts at the rate of 10s. in the pound, would not every creditor hasten off to his debtor and demand instant payment in gold, and so bring on instant bankruptcy and ruin?

The Bimetallists tell us that the adoption of Bimetallism will lead to a golden age of boundless prosperity

Mr. Herries, Mr. Huskisson, and Sir Robert Peel tell us that Bimetallism would bring us to **Universal Bankruptcy** in 24 hours

Which of these parties will sensible men believe?

TABLE SHEWING THE SUCCESSIVE DEPRECIATIONS OF THE GOLD  
AND SILVER COINAGES OF ENGLAND FROM A.D. 1344 TO THE  
PRESENT TIME.

SILVER.				GOLD.			
A.D.	Fineness	Alloy.	Mint Price of 1 lb.	Fineness.	Alloy.	Mint Price of 1 lb.	Ratio Gold to Silver.
	Oz. Dwt.	Oz. Dwt.	£ s. d.	Car. Grs.	Car. Grs.	£ s. d.	
1344	11 2	0 18	1 2 2	23 3½	0 0½	15 0 0	1 to 12 <sup>14</sup> <sub>34</sub>
1345	11 2	0 18	1 2 2	23 3½	0 0½	13 3 4	1 to 12 <sup>14</sup> <sub>34</sub>
1346	11 2	0 18	1 2 4	23 3½	0 0½	..	1 to 11 <sup>14</sup> <sub>34</sub>
1347	11 2	0 18	1 3 3	23 3½	0 0½	13 3 4	1 to 11 <sup>14</sup> <sub>34</sub>
1352	11 2	0 18	1 5 0	23 3½	0 0½	15 0 0	1 to 11 <sup>14</sup> <sub>34</sub>
1412	11 2	0 18	1 10 0	23 3½	0 0½	16 13 4	1 to 10 <sup>14</sup> <sub>34</sub>
1464	11 2	0 18	1 17 6	23 3½	0 0½	20 16 8	1 to 11 <sup>14</sup> <sub>34</sub>
1465	11 2	0 18	1 17 6	23 3½	0 0½	22 10 0	1 to 11 <sup>14</sup> <sub>34</sub>
1526	11 2	0 18	2 5 0	22 3½	2 0½	25 2 6	1 to 11 <sup>14</sup> <sub>34</sub>
1543	10 2	2 0	2 8 0	22 3½	2 0½	25 2 6	1 to 10 <sup>14</sup> <sub>34</sub>
1545	6 2	6 0	2 8 6	22 3½	2 0½	25 2 6	1 to 6 <sup>14</sup> <sub>34</sub>
1546	4 2	8 0	2 8 6	..	..	..	1 to 5
1547	4 0	8 18	2 8 0	..	..	30 0 0	1 to 5
1549	6 0	6 0	4 16 0	..	..	34 0 0	1 to 5 <sup>14</sup> <sub>34</sub>
1550	3 2	9 18	4 16 0	..	..	28 16 0	1 to 4 <sup>14</sup> <sub>34</sub>
1552	11 1	9 19	..	..	..	..	1 to 2 <sup>14</sup> <sub>34</sub>
1553	..	0 19	2 16 6	22 0	2 0	36 0 0	1 to 11 <sup>14</sup> <sub>34</sub>
1577	11 2	9 18	3 0 3	22 0	2 0	36 1 10½	1 to 10 <sup>14</sup> <sub>34</sub>
1601	11 2	9 18	3 2 0	..	..	36 10 0	1 to 10 <sup>14</sup> <sub>34</sub>
1604	11 0	..	4 2 6	22 0	2 0	36 10 0	..
1605	11 2	9 18	4 2 6	..	..	40 10 0	1 to 12 <sup>14</sup> <sub>34</sub>
1611	11 2	9 18	4 2 6	22 0	2 0	41 11 0	1 to 12
1612	11 2	9 18	3 2 6	22 3½	2 0½	40 18 4	1 to 13 <sup>14</sup> <sub>34</sub>
1623	11 2	9 18	3 2 6	22 3½	..	41 0 0	1 to 13 <sup>14</sup> <sub>34</sub>
1626	11 2	9 18	3 5 6	22 3½	..	44 0 0	1 to 13
1626	11 0	9 18	3 2 0	22 3½	2 0½	41 0 0	1 to 13
1670	..	..	..	22 0	2 0½	44 10 0	1 to 14 <sup>14</sup> <sub>34</sub>
1718	11 0	9 0	3 2 6	22 0	..	46 14 6	1 to 15 <sup>14</sup> <sub>34</sub>
1817	..	..	3 6 0	22 0	2 0½	46 14 6	1 to 14 <sup>14</sup> <sub>34</sub>



*The Silver Rupee declared the Sole Legal Tender in India—  
Demonetisation of Gold*

6. The Government of India took no action for several years on their weighty and important minute of 1806. But in 1818, being plagued as usual with the change in the relative value of Gold and Silver, by Regulation xiv. of that year, they changed the weight and fineness of the Gold Mohur, to accord more with the market value of Gold and Silver. The Gold Mohur was  $99\frac{1}{4}$  parts pure gold and  $\frac{3}{4}$  alloy : the new Mohur was  $\frac{1}{2}$  fine gold and  $\frac{1}{2}$  alloy. The ratio of Gold to Silver was 1 to 14·861 : it was changed to 1 to 15. The new Mohur was to pass current for 16 rupees as before. These Coins were equally legal tender till 1835. The Silver Rupee was then introduced as legal tender in Southern India, where hitherto gold had been the standard

At length in 1835, the Government gave up the attempt to maintain Bimetallism as hopeless. In that year they coined Gold and Silver Rupees, both of 180 grains : 165 grains pure metal, and 15 of alloy : or  $\frac{1}{2}$  fine. By Act xviii., of 1835, the new Silver Rupee was declared the sole legal tender throughout India, but the Gold Rupees were allowed to pass current, and be received at the Public Treasuries at their market value in silver

The great gold discoveries in 1848 and 1849 seemed likely to cause a great fall in the value of gold, and Holland, in a moment of undue panic, which it repented of afterwards, hastily demonetised gold

Lord Dalhousie seems to have taken the same alarm, and in the last week of 1852, he suddenly issued a notification that no gold coin of any sort would be received at the Public Treasuries after the 1st January, 1853. By this unfortunate action Gold was totally demonetised in India. It has been estimated that, in consequence of this notification, £120,000,000 of gold coin at once disappeared from circulation and was hoarded away, and this has been the cause of our present troubles

**Movements in India to procure the Restoration of the Gold Standard**

7. The demonetisation of Gold by Lord Dalhousie was soon felt in India to be a disastrous error, and a strong feeling grew up in favor of its restoration. The Chamber of Commerce of Bengal memorialised the Viceroy on the subject in 1859. But in 1864 a much more powerful movement was made. The Chambers of Commerce of Bengal, Bombay and Madras took the lead: and other Associations, and many officials of the highest rank, joined in it. They unanimously addressed the Viceroy to memorialise the Home Government to consent to the restoration of the Gold Currency

The Bengal Chamber of Commerce stated that the introduction of a Gold Currency into India was almost universally admitted to be a positive necessity demanded by various circumstances which had been developed within the last few years: and the time had arrived when that necessity should be at once recognised by the State, and measures promptly adopted which should gradually, but surely, lead to the adoption of Gold as the general metallic currency of the country, with Silver as the auxiliary. They referred to the correspondence they had addressed to the Viceroy in 1859, and they requested him to appoint a Committee to inquire into the subject

The Bombay Association addressed a memorial to the Viceroy dated 8th February, 1864, urging the introduction of a Gold Currency into India, as the existing Silver Currency was no longer adequate for the wants of commerce, which was seriously crippled by its inefficiency. From time immemorial until within the last few years India had an extensive Gold Currency, and the superior convenience of it was fully appreciated by the natives. The measures taken by the Government had suppressed the Gold Currency, but had by no means extinguished its popularity. The few Gold Coins in circulation commanded a considerable premium in the market: and the natives made an attempt to remedy the deficiency by circulating Gold Bars bearing the stamp of the Bombay Banks. That large quantities of gold had been discovered in neighbouring countries, which would greatly facilitate

the introduction of gold. That the direct trade with Australia was prohibited by the exclusive Silver standard, and the expansion of the commerce of India seriously impeded. That a Silver Currency might have been suitable to the country when its commerce was limited and payments in the main extremely small, but was very inconvenient when wealth was largely diffused throughout the country, and the operations of commerce had become so enormous. The transport of this bulky and cumbersome currency entailed heavy and useless expense on the country, and was a serious impediment to trade. The insufficiency of the existing currency had already caused severe financial embarrassment, and threatened the commerce of India with periodical and fatal vicissitudes. The reform was very urgently required, and could not be delayed without threatening national interests. The restoration of a Gold Currency would be most popularly received in India, both from ancient associations and present convenience.

The Bombay Chamber of Commerce said that the monetary condition of India was in the most unsound and unsatisfactory state, and its exclusive Silver currency was no longer adequate for the commerce of its vast population. The trade of Bombay had trebled within the last ten years: and last year the aggregate import and export trade alone of Calcutta, Madras, and Bombay had amounted to 1,060 millions of rupees. The resources of India were only then beginning to be developed, and were rapidly extending in all directions. That the annual produce of silver throughout the world did not exceed 10 millions, while the average annual importation into India during the last six years had been  $11\frac{1}{2}$  millions sterling, and last year it was  $14\frac{1}{2}$  millions. That the continued drain of silver for India must derange the Silver Currency of all other nations: and it was to the interest of the whole world, as well as of India, to introduce a Gold Currency into the country. That the special demand of India for Silver did not arise from any predilection for that metal, but was compulsory, and due only to their exclusive and inconvenient Silver Currency. That while the production of silver had remained stationary, that of gold had increased and was then at least 150 per cent. more than that of silver: and this revolution in the relative quantities of the precious metals showed the

necessity of a corresponding adjustment of the currency, and the introduction of gold: and that while there was not sufficient silver for India, there was abundance of gold for all. That while silver was transported from a great distance at heavy cost, gold might be cheaply obtained from adjacent countries. Thus the heavy charges on silver prevented its re-exportation, and thus it lost its reproductive power, and was a serious and unnecessary loss to India. That the exclusive silver standard and currency of India rendered direct trade with Australia and other gold producing districts impossible, and forced a country with abundance of gold to traverse half the globe in search of silver before she could pay for our commodities. The memorial then stated the excessive inconvenience and cost of such a bulky currency, which restricted trade and caused great loss of interest. The superiority of gold would secure an immediate and intelligent welcome for it in India. That the importation of gold into India had steadily increased for many years, though it was not legal tender. During the last year seven millions sterling had been imported, and since the returns last quoted, the importation into Bombay alone from the 1st May to the 31st December had been  $3\frac{1}{2}$  millions sterling. That the Natives themselves had devised a rude remedy for the deficiency of the existing silver currency by using gold bars stamped by the Bombay Banks as a circulating medium. That the exclusion of gold from the currency of India could not be justified or be considered other than barbarous, irrational, and unnatural. That the longer this reform was delayed, the more difficult it would become. The only remedy was to introduce a well-regulated gold currency into India.

These memorials were forwarded to the Viceroy by Sir Bartle Frere, the Governor of Bombay, with a strong recommendation in their favor.

Mr. W. R. Cassels, an official of the Bombay Government, presented an able and elaborate memorial to Sir Bartle Frere, utterly condemning the existing silver standard of India, also condemning an attempt to introduce a double standard, and strongly advocating a single gold standard.

The Madras Chamber of Commerce addressed a memorial to the Viceroy expressing exactly the same opinions as those of



Bengal and Bombay, strongly urging the introduction of a Gold Currency, and also a well-regulated Paper Currency

Sir William Mansfield, afterwards Lord Sandhurst, prepared a most elaborate and exhaustive memorial on the subject in eleven chapters, pointing out the great superiority of Gold to Silver as the standard of India. He pointed out that a double standard, or two metals joined together by a fixed legal ratio, is impossible, because the cheaper metal always drives the dearer one out of circulation

If a currency in one of the two metals can be carried on more cheaply than in the other, the former will be preferred. The relative value of the two metals, taken as commodities, and not as mere means of measurement, is carefully weighed, and according to the price of the metals as fixed by the value of other commodities, will be the choice made by the payers of taxes and debts as to which of the two metals shall be the medium of payment, or in which of the standards payment shall be made

When there is a so-called double standard of gold or silver, or to speak more accurately, a double legal tender, if it be more profitable to the community at large to pay in gold, payments will certainly be made in it, to the exclusion of silver, notwithstanding that the latter is equally a legal tender with the former. In such a case, silver practically subsides from circulation, and sinks into the rank of a mere commodity of trade, with the exception of a certain small quantity which executes very petty transactions: the place of silver in the circulation and deposit being occupied by Gold. Similar arguments show that in the reverse case, silver would establish itself as the sole medium of payments. All these arguments are confirmed by the experience of the United States

Justice could alone be done to the community of India by the introduction of a Gold legal tender. Sir W. Mansfield then enters into many details to show that the introduction of a Gold Currency was urgently required as a matter of convenience and economy to the people at large, and the losses caused by the exclusive use of silver

The natives were greedy of the metals in every form. Silver coined or uncoined, gold in bars and in bangles, have the greatest

charm for them. Gold on such account is brought into the Bombay market, and taken into the interior directly it appears. There was then no more profitable trade than to import gold for this purpose. An ingot currency, organised by the people themselves, had, as it were, sprung into existence on account of the greatly developed export trade. It was curious to note the determination of the population at large to acquire gold in preference to silver as a means of ornament and hoarding, as soon as their means allowed it. This fact was noticed and reported by collectors and superintendents of police. In some districts gold bangles were almost as common as silver ones were formerly. A district, which had been one of the poorest before the opening of the Godavery canal, had since become so wealthy that it had become a steady importer of gold: the people were determined to have gold. Every consideration of regard for the people, their convenience, and the economy of their means, showed that we were bound to give an official sanction to a gold currency, which, in a rude and barbarous fashion, they had adopted for themselves.

Sir William Mansfield then dwelt upon the prodigious increase of commerce and industry of all sorts within the preceding 50 years. At that period the foreign commerce of the country had been quite insignificant, but in 1865 it exceeded 100 millions sterling. This had caused an exclusively silver currency to be utterly inadequate for the present position of India, and it was to a certain extent corrected by the determination of the people themselves to possess gold, notwithstanding that silver was the sole legal tender. The demonetisation of gold in 1852 was a grievous error, and was in opposition to the old customs of India.

Sir Charles Trevelyan, the Finance Minister, prepared an elaborate minute, dated Simla, 20th June, 1864, urgently recommending the restoration of gold, but unfortunately it was tainted with the recommendation of Bimetallism.

Mr. J. C. Parry, of the Delhi Bank, had, under instructions, taken the opinion of the leading merchants and bankers, and they had no doubt of the success of the scheme, if gold were made the standard. One banker, who had agencies in every large town in India, said that silver should only be legalised as payment for fractional parts of a sovereign. The opinion was decidedly in

favor of making the sovereign the standard coin. Upwards of 250,000 sovereigns had been received in Delhi, the market value of which fluctuated from Rs. 10·1 to Rs. 10·5. He hoped that no half measures would be adopted.

Mr. Neale Porter, of the Sinde Bank at Umritsur, had had a large meeting of city notables, town councillors, magistrates, mar-warries and bankers, who were quite favorable to the sovereign as the gold unit, which was quite well known in the district, and was strongly in favor of it himself.

Mr. L. C. Probyn, deputy auditor and accountant-general for the Punjab, said that the people themselves were establishing a gold currency, which was very popular with all classes. The value of the sovereign in Lahore fluctuated from Rs. 9·14 to Rs. 10·8. Immense amounts of gold had been imported into the Punjab.

Mr. D. F. MacLeod, Financial Commissioner to the Punjab, said that the ideas of the bankers were rather hazy on the subject, as they could not realise all the effects of making gold legal tender at a fixed ratio to the rupee. On the whole they were rather favorable to having an abundance of gold. *But they were incredulous as to the possibility of maintaining the relative value of gold and silver at an absolutely uniform rate by the fiat of authority.*

Wise men! the scheme of the Government was afterwards wrecked on this very point!

They were unhesitatingly in favor of the sovereign, because it was the coin most familiar to them, being most abundant, and almost the only one used for equalising the exchanges: and if a gold currency were introduced, the cash balances would become much more available, and it would facilitate the adoption of a paper currency.

Mr. P. S. Melvill, Commissioner at Umritsur, convened a meeting of the best informed merchants and shroffs, and they were decidedly in favor of the measure: and also in favor of the sovereign, both as regards its sterling value and its exchange value. Sovereigns, to the amount of a lakh of rupees, were usually imported every month from Calcutta. This was about four times the amount in the Seikh times, and was owing to the increase of trade.

Mr. Donald MacLeod said that the introduction of sovereigns

into Rangoon would be highly beneficial. They were very popular in Burmah, and should be the only gold coins. They would be beneficial to trade in every way

Mr. J. C. Todd said that he quite agreed with the universal opinion in India that the sovereign should be made the standard gold coin, as it was bought in large numbers by the natives, and, therefore, was free from the disadvantages of a new and unknown coin. It would be a great boon to commerce to substitute a light and valuable medium for a ponderous and unwieldy one, the full value of which could only be appreciated by those who come daily into contact with the trouble and inconvenience of the silver currency

In 1858, a large number of the collectors in Southern India reported that large quantities of sovereigns were in circulation in their district: and that the natives complained bitterly of the losses and inconvenience they suffered from their not being received at the public treasuries. The sovereign only passed for Rs. 9-14 in consequence of this. Some of the collectors requested that they might be allowed to receive sovereigns in payment of public dues. In a few cases this permission was grudgingly given

In consequence of this powerful movement and the vast body of evidence they had collected, the Government of India, on the 14th July, 1864, addressed a dispatch to the Home Government requesting them to authorise them to declare that British and Australian sovereigns and half sovereigns should be made *legal tender throughout the British dominions in India at the fixed rate of 10 rupees for the sovereign*

Such a proposal was foredoomed to failure, because it was pure and unadulterated Bimetalism. It showed that its authors had not grasped the fundamental principles of Petty, Locke, Harris, Lord Liverpool, the Minute of the Governor-General of India in 1806, and the principles upon which the British Coinage was established in 1816—that one metal only should be adopted as the standard, and coins of other metals should be only subsidiary, and legal tender to a small limited amount

In answer to this despatch, Sir Charles Wood, Secretary of State for India, replied on the 26th September, 1864

He said that their practical proposal was to make the sovereign and half sovereign legal tender in India for 10 rupees and 5 rupees respectively : and *ultimately* to establish a Gold standard and currency in India, as in England and Australia : with a subsidiary coinage of silver, the silver coins not possessing the intrinsic value they represent, and being legal tender only to a certain amount

It appeared from the evidence that there was a general desire for the introduction of a Gold Currency into India, that the people were well acquainted with the sovereign, and that its introduction would be well received, that it would circulate freely at 10 rupees, and that it would be a great advantage to have the sovereign as the common currency of India, England, and Australia

But he very naturally objected to the proposal of the Indian Government

Where coins of two metals, gold and silver, are equally legal tender, those of the metal which, at the relative legal rating of the two metals, is cheapest at any period, are thereby constituted the currency, and the metal of which they are made, becomes practically the standard at the time : and, further, a very slight difference in the relative value of the two metals may change the standard and the whole currency of a country

This was exemplified in the recent change in the circulation of France. In that country coins of gold and silver were equally legal tender. Gold coins containing one ounce of gold were legal tender for the same sum as silver coins containing  $15\frac{1}{2}$  ounces

Before the recent discoveries of gold, an ounce of gold was worth in the markets of Europe nearly  $15\frac{3}{4}$  of silver. It was, therefore, according to the relative legal rating of gold and silver, more advantageous to pay in silver than in gold. Silver coin, therefore, for many years formed the currency of France, the gold coin bearing a premium. Since the recent discoveries of gold the value of gold relatively to silver has fallen to about 1 to  $15\frac{1}{2}$ . This difference has rendered it more advantageous to pay in gold. Gold has displaced silver, and now forms the currency and standard in France

[We have already shown that this very slight change in the

relative value of gold and silver sufficed to drive £150,000,000 of silver out of France, and to substitute £150,000,000 of gold instead of it. So much for the theories of Bimetallists]

The very same principle applied to India. How was it possible to imagine that the sovereign could bear a fixed ratio to the rupee throughout India? Such a measure would be totally inoperative

Sir Charles Wood, therefore, very properly quashed this fatuous proposal. But he saw no objection to reverting to the state of matters which had prevailed in India for many years, that gold should be received into the public treasuries at a rate to be fixed by Government, and publicly announced by proclamation

[This was not the plan previously in use, the Gold Coins were received in the Treasuries, at their market value, and not at a rate fixed by Government, which just made all the difference]

Sir Charles Wood concluded by authorising the Indian Government to make it known that British and Australian sovereigns and half sovereigns would be received, until further notice, at the rate of 10 rupees and 5 rupees respectively, and would be paid out again at the same rate unless objected to

To Sir Charles Wood's innocent eyes this plan appeared entirely unobjectionable. It was in accordance with the cautious and tentative course recommended by the Chamber of Commerce of Bengal: it would, as far as it went, facilitate the use of the sovereign and half sovereign in all parts of India: it would pave the way for the use of gold coinage in whatever shape it might ultimately be found advisable to introduce it: and at the same time it established a preference in favor of the sovereign

Sir Charles Wood was soon undeceived: his plan turned out a complete failure: it never facilitated the use of the sovereign in India: it never paved the way for the use of a gold coinage in India. It fell absolutely stillborn! and why? *Because it was tainted with Bimetallism.* If the Treasuries had been allowed to receive sovereigns at their market value, they would in a very short time have accumulated a vast quantity of gold, which would have enabled them to resume a gold currency: but they fixed the price of the sovereign at 10 rupees, when the current market value

of the rupee was some annas above that. And this little fly made the whole pot of ointment stink! It ruined the whole project: nobody would be so silly as to pay in sovereigns to the Treasuries at the rate of 10 rupees, when their market price was some annas higher. Just as no person of common sense would pay sovereigns into his account, if his banker only gave him credit for 19s. for them. On such minute delicacies do scientific processes depend

Now if the powerful movement of which all India was in favor had been intelligently carried out by the Government, India might have had the sovereign as the standard coin of India thirty years ago, and it would have saved millions and millions of loss both to the Government and to private persons. But as school-boys say—they muffed it

The proposal of the Indian Government was Bimetallism pure and unadulterated, and would have failed instantly and utterly: the plan of Sir Charles Wood was a kind of demi-semi, shilly shally, half-and-half Bimetallism, which entirely failed to succeed

Thus both plans were wrecked on Bimetallism, which has poisoned and ruined every system of Coinage which it ever touched.

And more than that—it has thrown discredit on all attempts to restore a Gold Currency to India. At the present day many persons, when they hear of renewed attempts to restore a Gold Currency to India, shrug their shoulders, and say—"Oh! it was tried in 1864 and it failed"—"It is like flogging a dead horse." But they never seek to ascertain the causes of its failure. Thus—"The evil that men do lives after them"

*Mr. Hollingbery's Report to the Government of India, 1875*

The failure of the scheme to restore a Gold Currency to India in 1864 did not dishearten its advocates

In 1875 Mr. Hollingbery, Assistant Secretary to the Government in the Financial Department, addressed a most able Report to the Government on the consequences which the fall in the value of silver had then produced on the finances and material progress of India<sup>1</sup>

<sup>1</sup>*Loss by Exchange, or the Depreciation of Silver, and the effects of its further Depreciation on the Finances and Material Progress of Ind. a.* Simla, 1875

At that date the price of silver had fallen to  $57\frac{1}{2}d.$  per ounce. The local value of silver had not fallen from what it was before the great fall of it abroad. But in course of time it must fall to its value abroad, though it would take a considerable time to do so. It is quite impossible in this place to enter into all the details given in this elaborate document, but the writer shows that all the losses and inconveniences caused by the comparatively small fall in its value at that time would have been avoided if India had had a gold standard. He shows that when the legal ratio of gold to silver was 1 to  $15\frac{1}{2}$  in Paris, and the ratio in London was 1 to  $15\frac{2}{3}$  or  $15\frac{1}{4}$ , that small difference was sufficient to introduce from 150 to 200 millions of gold into the currency of France, and to cause the withdrawal of an equal amount of silver: and he shows that what was wanted in India was not the withdrawal of silver as a bullion operation, but the substitution of gold for silver in future importations of bullion for settling any balance of trade. The question was, therefore, not what a difference in value between gold and silver would suffice to expel silver, but what would be sufficient to make the future importation of gold into India for coinage more profitable than the importation of silver.

He then describes the measures to be adopted to promote the transition from a silver to a gold standard.

He estimated the quantity of silver in circulation in India at 130 millions sterling: and that 60 millions of gold would be far more than sufficient to restore a Gold Currency.

He shows that with a Gold Currency the cost of remitting 15 millions sterling for home charges would never exceed the cost of sending gold from India to England, that is  $\frac{7}{8}$  or 1 per cent. But, owing to the balance of trade being always in favor of India, the Council Bills would always be at a premium, so that instead of a loss there would always be a profit.

He shows that countries which have a silver currency, which have an adverse balance of trade, or borrow in gold-using countries, experience a heavy loss in making remittances to the latter countries: for which reason they find it necessary to adopt a gold standard: and every new country which adopts a gold standard makes the necessity more urgent for the remaining silver countries to conform to the general custom of the world,



and adopt Gold as the sole legal standard. And the effects of this fall will be disastrous to India, because it will be the only country in the East which will offer a fixed price for silver, irrespective of its depreciation abroad, and so it will be flooded with depreciated silver

By persisting in retaining silver as the standard of India, the finances and the progress of India will be irremediably injured : on the other hand, great financial advantages and commercial good to that country and the world would follow from the adoption of a Gold Currency in India. And it was not a mere fanciful desire of change, but stern necessity, which compelled the European States to adopt a Gold standard. The same principles which apply to European States also apply to India. The postponement of a change to a gold standard would not arrest the evils which were in progress from the fall in the value of silver, while the longer the change to a gold standard was delayed, the more difficult and expensive, but not the less inevitable, will it be in the end

This most able report, written in 1875, deserves the most careful study, as every one of its prognostications has been fully verified and intensified. When it was written the price of silver was  $57\frac{1}{2}$ , and the loss on exchange alone in remitting for the payment of the Council charges was a million and a half : at the present time it is about  $29d.$ , and the loss on exchange is proportional

Some further attempts in the same direction were made, but they were fruitless

At length the terrific down plunge of silver, and the expected repeal of the Sherman Act in America, which was effected by the strenuous efforts of President Cleveland, roused the Government from its apathy, and they closed the Indian mints to the free coinage of silver, but as the scheme of the Government is not yet completed, it is better to refrain from any comments on it

We do not give any account of the Coinage and Currency of America, because that would require a large volume to examine all its intricacies and complicated vagaries, but the principles set

forth in the preceding pages have been fully verified there, as being universally true

### *The Assertions of the Bimetralists Confuted*

**8.** We have now laid before our readers a sufficient account of the Coinages of different countries for five centuries : and the arguments and judgments of Oresme, Copernicus, Gresham, Petty, Locke, Harris, Sir James Steuart, Lord Liverpool, the Government of India in 1806, the Government of England in 1816, the debate in the House of Commons in 1830, and the statements of the memorialists in India in 1874 and 1875 : and they are absolutely unanimous

We stated at the outset of this inquiry that the question has but one simple issue—

Supposing that Coins of Gold and Silver are issued in unlimited quantities at a fixed legal ratio—

(1) Is it the legal ratio fixed between the Coins which governs the relative value of the metals in bullion ?

(2) Or is it the relative value of the metals in bullion which governs the relative value of the Coins ?

*The Bimetralists assert that by Fixing a Legal Ratio between Gold and Silver it is possible to maintain a Stable Ratio between them*

1. The Bimetralists maintain the first of the two issues above stated. Senator Stewart, of Nevada, may be taken to represent the dogmas of the Bimetralists. He asserted that, during all the period in which a fixed legal ratio had been maintained between the Coins, the value of the metals had remained stable

Mr. Cotterell-Tupp, late Accountant-General to the Government of India, Bombay, who was one of the earliest founders of Bimetralism, in a very interesting paper he read before the East India Association, 28th March, 1892,<sup>1</sup> in which he truly states the stupendous losses caused to India by the fall in the value of

<sup>1</sup> *The Effects on the Finances and Commerce of India of the Fall in the Gold Value of Silver.* Journal of the East India Association. Vol. XXIV., 1892

Silver, says—"It is we Englishmen who have done this thing, *not* we Anglo-Indians, I am glad to say; but the stay-at-home, know-nothing Englishman, who says 'gold is good enough for him,' and that the 'unlikely look of Bimetallism would have more effect on the minds of Englishmen than any *argument*'

"It is we Englishmen who alone prevented the free coinage of silver after the Paris conference of 1881, when France, Germany, and America were all willing to sanction it: and we alone as a nation stood apart in our apathetic insularity, and although we knew that our greatest dependency, and that one which is most utterly dependent on us in matters of Finance and Currency, was the country which was suffering most from the depreciation of silver, yet we would not raise a hand to save her, or even give any encouragement to other nations who were ready and willing to do so"

Then he says that losses incurred by India are "a tribute to stupidity, to indifference, and to ignorance, and it is a fearful and heavy burden which Englishmen would and could at once remove from India, if they would only take the trouble to understand the question, and to grasp the immense folly of allowing things to go from bad to worse, merely for the want of a little attention and understanding"

After describing the effects on the officials and salaried classes in India, he concludes—"I would urge you to study the silver question, if you have not done so: to examine the subject of Bimetallism carefully and impartially, and to see whether you do not become convinced of the truth of its doctrines. If you do become so convinced, preach its gospel to all you know; talk of it: speak of these fearful evils which I have described to you: bring home to others that there is here a crusade worthy of any man's energy and devotion, a cause as worthy of support as any of those to which men give their lives: and try to convince them that *nothing* stands in the way of a speedy and entire deliverance from all these troubles and misfortunes but the inveterate obstinacy and prejudice of the English nation, which prevents America and France from at once restoring silver to its proper value *by one stroke of the pen*, and without loss to any human being"

The audacity of these assertions is enough to take our breath away, because the experience of ages proves that the truth is the exact reverse of what Senator Stewart and Mr. Cotterell-Tupp assert

We have shown that the judgment of the illustrious authorities whom we have cited, many of them perfectly independent of each other, upon a full consideration of the facts before their eyes, is clear, decided, and unanimous

They unanimously decide that it is the relative value of the metals in bullion which regulates the relative value of the coins.

They unanimously decide that the sole power and duty of the Law is to maintain the Coins at a fixed legal weight, fineness, and denomination

They unanimously decide that the Law has no power whatever to regulate the Value of the Coins, *i.e.*, their power of purchasing, or exchanging for, other things

Consequently it is wholly beyond the power of Law to regulate the relative market value of Gold and Silver

Coins are nothing but pieces of bullion stamped with a certificate to denote their weight, fineness, and denomination : and if the metal is changed from the form of bullion to that of coin, free of all charge, the value of the metal in Coin is identical with that of the metal in bullion

If any charge is made for changing the bullion into coin, the value of the metal in coin differs from the value of the metal in bullion by exactly the cost of changing it from one form into another, and no more

And when Coins are exported to foreign countries they have exactly the value of the quantity of pure metal they contain

All these illustrious writers, except those who declared for a single standard, pointed out that the Law must regulate the value of the Coins according to the relative market value of the metals in bullion. This was for a long time attempted to be done ; but the attempt was finally abandoned as hopeless, as it only led to constant disturbances in the coinage

Not a single writer during this long period ever maintained that the legal ratio of the Coins could govern the relative value of the metals in bullion

Accordingly, among all persons of sound judgment, the Mono-metallic system of Coinage was gradually accepted as demonstrated, just as the heliocentric system of Astronomy of Copernicus was gradually accepted by all astronomers

The Government of India, in 1806, was the first Government of a great Empire to declare its adhesion to this principle

In 1816 the Government of Great Britain was the first to adopt it in practice, and established our present system of Coinage, in conformity with the facts established by the experience of ages and the arguments of the most eminent authorities, and being tested during the period of 78 years, has proved itself to be the most perfect system of Coinage ever devised by the ingenuity of man, and which State after State is now adopting

*The Bimetallists assert that it was the closing of the French Mints in 1874, which caused the Fall in the Value of Silver*

2. One of the most persistent assertions of the Bimetallists is that it was the closing of the French Mints in 1874 which caused the fall in the Value of Silver, whereas the direct reverse is the fact,—*It was the Fall in the Value of Silver which caused the closing of the French Mints*

Even in 1865, when the Latin Union was formed, Italy declared herself in favor of a single gold standard. But soon after the formation of the Union, the value of Silver had begun to fall, and to create uneasiness in France. A Commission was appointed in 1867, but the majority were not then convinced of the necessity of adopting a single gold standard, and reported against it

But the fall continuing and becoming more severe, the majority of a Commission in 1868 reported in favor of adopting a single gold standard for France: and a Commission in 1869-70 came to the same conclusion

In Germany also the fall in the value of silver began to create disturbance, and in June, 1870, a Commission was appointed to consider the expediency of adopting a single gold standard in Germany

But the war of 1870-71 put an end to these discussions

By Acts of November, 1871, and May, 1873, Germany adopted a single gold standard, with a subsidiary currency of silver

In December, 1872, Belgium adopted a single gold standard, with silver as subsidiary

In December, 1873, a debate was held at the Société d'Economie Politique on the question of a single or a double standard, and the majority was in favor of a single gold standard

A Monetary Conference was held in Paris in January, 1874. M. Dumas, of the Paris Mint, presided : M. de Parieu was Vice-President. The right of the free coinage of silver was abolished. This, as the *Economist* said, was "an adhesion to the theory of a single gold standard on the part of the French Government, and their appointment of M. de Parieu as one of the Commissioners to represent them, is a fresh sign of their being in favor of the gradual abolition of a law which, *after 70 years' experience, is found to be effete in theory and prejudicial in action*"

Thus the assertions of the Bimetallists are utterly confuted. It would be absurd to suppose that the French Government would have taken such a serious course as to close the Mints to the free coinage of silver without extremely cogent reasons. It is now shown that the necessity for this step had been foreseen for six years, and it was only done after the fullest discussion, and by the recommendation of the most experienced authorities

• Bimetallists run about the country whimpering that no one ever attempts to answer their arguments, they pour their woes into the ears of sympathising meetings of fortuitous atoms that they are totally ignored by an apathetic Philistine public—and the reason is very simple, they have never yet produced one single reason or argument that the long tried and approved system of Coinage, which is now established after centuries of experience, and the unanswered and unanswerable arguments of a series of some of the most illustrious men that the world ever saw, that Bimetallism is impossible, and that Monometallism is the only system of Coinage which can preserve stability

They do nothing but pour forth torrents of frothy rhetoric and declamation, with abusive epithets on all the solid arguments

upon which Monometalism has been adopted, which they are pleased to term exploded fallacies

The claim of the Bimetallists is to have the ratio between Gold and Silver fixed by Law. Both Oresme and Copernicus showed this is impossible

Oresme in 1366, showed that if it is possible to fix the value of one thing by Law, it is possible to fix the value of everything. Why then fix only the value of Gold and Silver by law? Great mercantile calamities are caused by the sudden variations in the value of commodities. Why not then fix the value of all commodities? And that would save vast mercantile calamities

Landlords and farmers are suffering grievously from the low prices of agricultural produce, caused by the vast importations from foreign countries. Why not then fix the value of all agricultural produce at highly remunerative figures, and at once relieve their distress? Does any person of common sense suppose that if every country separately, or all nations combined, made a law that the price of wheat should be 60s. a quarter, that that would raise the price of wheat one farthing?

Copernicus, in 1526, showed that a country can no more have more than one measure of value, than it can have more than one measure of length, or weight, or capacity

What would anyone of common sense say if the Law were to allow two kinds of yards, one of three feet and the other of two feet to be in common use in the country, and should declare that these two differing yards were equal in length

What would anyone of common sense say if the Law allowed a pound and an ounce to be equally called a pound, and declared them to be of the same weight?

What would anyone of common sense say if the Law allowed two standard measures of capacity to be used, one of which contained a quart, and the other contained a pint, and declared them to be equal?

Would it not be equally grotesque for the Law to declare that the ratio of gold to silver should be 1 to  $15\frac{1}{2}$ , when the market ratio of gold to silver is 1 to 35: thereby declaring that  $15\frac{1}{2} = 35$

Locke, in 1692, showed that if the Law could fix an arbitrary

ratio between gold and silver, it might fix it at anything. Why then should not the Law declare that Gold and Silver should be equal in value weight for weight? : and so the fortunate possessors of silver would suddenly find themselves 35 times as rich as they were before

It is melancholy to find fallacies, so clearly refuted by Oresme in 1366, by Copernicus in 1526, and by Locke in 1692, and which are contrary to the very rudiments of Economics, repeated at the present day by multitudes of grown men of ability who have good sense in the common affairs of life !

Some Bimetralists allege as an argument that nature has provided two measures of value, as she has provided men with two legs, and that it is as absurd to refuse one measure of value as it would be to cut off one of a man's legs

But Commerce does not rest upon *two* legs only—but upon *four*—Paper, Gold, Silver and Copper—all these are equally indispensable to the commerce of this, or any other, great mercantile country

A copper, bronze, or other similar currency is quite as indispensable as a gold or silver currency. Why then should not the Law declare that Copper should be coined in unlimited quantities, at the fixed ratio to gold of  $15\frac{1}{2}$  to 1, when its natural ratio is about 900 to 1

If it were proposed that sovereigns and copper coins at the ratio of 1 to  $15\frac{1}{2}$  should be coined to unlimited amount and made legal tender—would not the keenest Bimetralist shudder at such a proposal and see its absurdity? And yet copper is quite as important to the immense majority of the people—the very poorest—as silver to the middling classes, and gold to the wealthy classes

In fact the wants of such a country as this, and similar ones, imperatively demand a metallic currency of *three* different kinds : if, therefore, we are to have Bimetralism, the natural, logical, and inevitable consequence is that we must have **Trimetalism**

Why should not all metals be coined in unlimited quantities, and made legal tender at the ratio to gold  $15\frac{1}{2}$  to 1 ? Bimetralists are clamoring for an increase of the currency : this plan would give them an increase of the currency to their heart's content



Copper, or any other metal, is quite as much a natural measure of value as gold or silver, and in a vast multitude of cases a much better one. And exactly the same principle applies to coining all metals in unlimited quantities at the ratio to gold of  $15\frac{1}{2}$  to 1, and making them legal tender, as applies to coining silver at the ratio of  $15\frac{1}{2}$  to 1, and making it legal tender to an unlimited amount

But in any great mercantile Country **Paper** is infinitely more adapted to large transactions than Gold, Silver or Copper

The rock upon which Bimetralists, and most other persons, founder is in considering Gold and Silver *only* to be the Currency or Circulating Medium. But the Currency or Circulating Medium consists of **Credit** in all its forms, both written and unwritten, **Gold, Silver and Copper**. And it is the aggregate of these *four* forms of Currency which forms the Measure of Value, or of Prices

And of these four forms of Currency Paper, *i.e.*, Credit, exceeds all the other three one hundred fold. And it is the vast expansions and contractions of Credit which govern prices far more than any minute variations in the quantity of gold and silver.

An eminent City firm laid before the Committee of the House of Commons on the Panic of 1857, an analysis of the operations of the house for one year, and they showed that out of £2,000,000 of payments and receipts, only £40,486 were paid in Gold, Silver and Copper: and all the rest in various forms of **Credit**. Some bankers instituted an inquiry into the ratio of specie to Credit in banking operations, and the result was that only 4 per thousand, or .0025 per cent. were in specie, and all the rest in Credit. Hence the ratio of specie to Credit was less than 1 to 99. That is to say that in the price of commodities 99 parts consist of Credit, and only 1 part of specie. We shall return to this afterwards

It has now been shown that the assertion of the Bimetralists that it is possible to maintain Gold and Silver Coins, issued in unlimited quantities at a fixed legal ratio, in circulation together in any country, is wholly unfounded: and that the *only* way to keep Silver in circulation along with Gold is strictly to limit its quantity, as is done in the Monometallic system

*Bimetallists assert that the Monometallists wish to Demonetise Silver*

3. The Bimetallists persistently assert that Monometallists wish to **Demonetise** Silver. But such a statement is wholly contrary to fact. No Monometallist was ever demented enough to conceive the fatuous idea of demonetising Silver. To *demonetise* a Coin, or a metal, is to exclude it totally from the currency, to forbid it totally to pass in payment for goods or debts

The Monometallists perfectly allow that Silver and Copper, or other similar metal, are indispensable portions of the Currency, or Circulating Medium. But Silver and Copper are independent measures of value, not convertible at will into Gold. Monometallists know by the experience of ages, and the clearest reasonings of the most eminent writers, that if Gold, Silver and Copper are allowed to circulate simultaneously in unlimited quantities at a fixed ratio, the one of the three which has the **Least** market value will infallibly drive the other two out of circulation, and itself remain alone in circulation. If Silver and Copper were allowed to circulate in unlimited quantities, and be made legal tender to an unlimited amount at the fixed ratio of  $15\frac{1}{2}$  to 1 to Gold, throughout the world, it is an assured fact that Copper would immediately drive both Gold and Silver out of circulation, and itself alone remain in circulation, throughout the whole world. So that Copper alone would be the Universal Currency. Do Bimetallists wish to bring about such a result? And yet that is the necessary logical consequence of their doctrines

What Monometallists contend for is this—That while Silver and Copper are indispensable portions of the Currency, they must be placed under such regulations as will always insure that they preserve a par value with Gold, which can only be done by adopting the well tried and long approved British System of Coinage, which is now being followed throughout the whole world.

Furthermore, Monometallists maintain that the Supplementary Currency, *i.e.*, **Credit**, or **Paper**, which is based upon the Standard Unit must be placed under such regulations as that it shall always preserve a par value with it, into which it professes to be convertible. So that the whole Circulating Medium or Currency,

which comprehends *four* different terms—**Credit or Paper, Gold, Silver and Copper**, and the aggregate of which constitutes the Measure of Prices, shall always preserve a uniform par value with the Standard Unit, and so, on the whole, constitute but **one Uniform Measure of Value**

The assertion, therefore, of the Bimetallists that Monometallists wish to demonetise Silver is wholly unfounded

*The Bimetallists assert that if Gold or Silver were coined in unlimited quantities at a Fixed Legal Ratio, both metals would circulate together, and so enlarge the Circulating Medium, or Currency*

4. This assertion, which indeed contains the pith of the whole case of the Bimetallists, is proved to be utterly unfounded, by the experience of 600 years

Passing over the earlier period in which this assertion was shown to be totally unfounded, we may come to modern times when the system of Bimetallism, which the Bimetallists advocate, was in force

In 1666, Charles II. opened the Mint to the free Coinage of Gold and Silver in unlimited quantities, and without any charge. By the Mint Indentures it was intended that guineas should pass current for 20s., but they were never made legal tender at that rate, and they were allowed to pass current at such a rate as the public chose to receive them. Silver was the standard unit, and guineas soon passed for 22s. : and it was only because they were not tied by any fixed legal ratio to silver that they remained in circulation at all. If it had been attempted to have made them legal tender for 20s., they would have instantly disappeared from circulation. The Silver coins became so degraded and debased that guineas rose to 30s. On the re-coinage, Parliament reduced their value gradually, and by several Treasury Warrants their price was finally fixed at 21s. 6d. Thus the Bimetallists had their ideal system. Did then Gold and Silver circulate together? Quite the reverse. All the good Silver disappeared as soon as it was issued from the Mint. Sir Isaac Newton showed that the true market value of the guinea was only

20s. 8d., and recommended that it should be reduced to 21s. by way of experiment, and it might afterwards be seen if any further reduction was necessary

Parliament acted upon this suggestion, and in 1717, the value of the guinea was reduced by proclamation to 21s. In 1718, it passed a resolution that no further changes should be made, and none were made till 1816

Here again was the ideal system of the Bimetralists. The Mint was open to all comers for the free coinage of Gold and Silver without any charge, at the fixed legal rate of the guinea at 21s., and did the result correspond to the vaticinations of the Bimetralists? Did Gold and Silver circulate together at the legal ratio? Did people bring their Gold and Silver in large quantities to be coined at the fixed legal ratio?

It was in all respects exactly the contrary. The guinea being overrated by 4d. drove the whole of the good silver out of circulation. During the whole of the century the silver in circulation was nothing but the basest trash. No one brought their Silver to the Mint to be coined. What person of common sense would bring his silver to the Mint to be coined, when silver that was worth twelvepence in bullion, was reduced by coining to the value of ninepence? The Master of the Mint testified in 1816 that during the whole of the 56 years of the reign of George III. only £64,000 in silver were coined at the Mint

It was in 1717 that the custom and usage of merchants established Gold as the sole standard of payment, and thus England became practically a gold Monometallic country, both for all internal transactions as well as for the Foreign Exchanges, though the effete words of Bimetralism were not expunged from the Statute Book for another century. The Master of the Mint declared in 1816 that the Law merely established and legalised the system which had been adopted by public opinion since 1717

Again, let us take the period which Bimetralists themselves cite as the golden age of Bimetralism—that from 1803 to 1873 in France

After multitudes of changes the ratio between Gold and Silver was fixed in France at about the same period as it was fixed in England ; but in the reverse way. Silver was overrated and Gold was underrated. Gold disappeared from circulation, and France became practically a Silver Monometallic country, for the very same reason that England became practically a Gold Monometallic country

In 1803 Silver was declared the standard unit, but Gold and Silver Coins were freely coined at the legal ratio of 1 to  $15\frac{1}{2}$ . Here then again was the ideal system of the Bimetralists, which they themselves cite as their golden age. Did, then, Gold and Silver equally circulate together in large quantities in France from 1803 to 1873 ? It was exactly the contrary. Soon after 1803, such immense quantities of silver were brought into France as the plunder of foreign countries, that, while the legal ratio was 1 to  $15\frac{1}{2}$ , the market ratio fell to 1 to 17. From 1803 to 1850 gold was constantly at a premium. The inevitable consequence followed, there was no gold in general circulation, and when gold was wanted, a premium had to be paid for it

In 1850 the market ratio of Silver to Gold was  $15\frac{3}{4}$  to 1 : but soon after the gold discoveries in California and Australia, the market price of gold began to fall. In a few years the ratio of Silver to Gold fell, or the value rose, from  $15\frac{3}{4}$  to  $15\frac{2}{6}$ , or  $15\frac{1}{3}$ , and that apparently slight change in the market value of Gold and Silver was sufficient to drive the whole of the Silver Currency out of France, and substitute Gold for it. In a very few years, from 150 to 200 millions of Silver were displaced, and from 150 to 200 millions of Gold were substituted for it. Consequently this vast amount of gold was not *added* to the already existing Silver Currency, according to the fanciful dreams of the Bimetralists, it simply *displaced* the Silver, and the standard was changed from Silver to Gold, without any augmentation of the Currency. Thus the imaginative assertions of the Bimetralists are completely disproved by the inexorable logic of facts

Soon after the formation of the Latin Union, Silver began to fall, and it became clear to the eyes of the Government that it was impossible to maintain both metals in circulation at a fixed

legal ratio. Commissions in 1868 and 1869-70 pronounced in the strongest manner in favor of a single gold standard. After the war in 1873, and after Germany and Belgium had adopted the single gold standard, a solemn debate was held by the supporters of the two systems at a meeting of the *Société d'Economie Politique*, and the majority of the meeting was equally convinced that it was absolutely impossible to maintain both metals in circulation in unlimited quantities, at a fixed ratio. Thus it was found to be the conviction of the majority that Bimetallism is a delusion and a chimera, and accordingly the French Mint was closed to the free coinage of silver in 1874 : and then, for practical purposes, France became a Gold Monometallic country, because her foreign exchanges are settled in Gold : although the illusory nominal rate still remains on her Statute Book, as it did in England for a century. Thus practical necessities and mercantile usage and custom completely set at naught a few vain words printed in a book

Thus, when the Bimetallists tell us that a legal ratio between Gold and Silver, was for centuries maintained both in England and France, they are, in a Pickwickian sense, like those juggling fiends that palter with us in a double sense, that keep the word of promise to the ear, and break it to the hope. They commit both the *suppressio veri* and the *suggestio falsi*. They tell what is true in the letter, that a legal ratio between Gold and Silver was printed in a book both in England and France for centuries, and they would have us believe that this had the effect of keeping the market value of the metals at that rate, and both metals remained in circulation at the fixed legal ratio : whereas they wholly omit to tell us that the actual facts utterly belied the delusive expectations they hold out to us. The actual facts were that the metal which was overrated invariably drove out the metal which was underrated, and alone remained master of the field. That under the Law of Bimetallism the two metals never circulated together in any country. That so far from the fixed legal ratio governing the value of the metals, Governments had from time to time to alter the legal ratio so as to conform to the market ratio : and that all civilised Governments have now

become convinced of the necessity of abandoning this ridiculous and delusive farce, and of conforming themselves to the demonstrated Laws of Nature

*No Responsible Government will have anything to do with*  
**Bimetalism**

9. The example set by England in 1816, of adopting a single Gold Standard, with Silver only as subsidiary, and limited to small change, had now been followed by Belgium—and by France for all practical purposes, because by permitting an unlimited issue of Gold in which her Foreign Exchanges are settled, and rigorously restricting Silver, she practically became Monometallic, although she allows five franc pieces to be unlimited legal tender in her internal commerce; and although the illusory ratio of  $15\frac{1}{2}$  to 1 still remains on her Statute Book, it is practically dead—and was soon afterwards followed by several other States

**Holland** had a Bimetallic currency, gold and silver being equally legal tender. When the great discoveries of gold took place, being alarmed at the prospect of a great fall in the value of gold, she demonetised gold in haste in 1853, and repented at leisure. In 1872, she began to perceive the necessity of retracing her steps, and found the inconvenience of maintaining a silver standard, when all her neighbours had a gold one. At first she hankered after reverting to Bimetalism. But at length in 1875, the slow moving Dutch became convinced of its hopelessness, and of the necessity of conforming to the monetary systems of her neighbors, and adopted a single gold standard

**Scandinavia**, comprising Denmark, Sweden, and Norway, had a silver standard, but in 1876 adopted a uniform gold standard

In 1877, **Finland**, being sorely troubled with the fall in the value of silver, adopted a single gold standard, and has since found perfect peace

**Japan** was afflicted with the monetary troubles which inevitably follow an attempt to maintain Bimetalism. When the country was opened up to foreign commerce, it was flooded with foreign silver dollars which brought down the whole system. In vain she tried to maintain Bimetalism at the ratio of  $15\frac{1}{2}$  to 1,

but at length, finding it hopeless, in 1872 she adopted a single gold standard, with silver as subsidiary, and legal tender for about 40s.

**Italy** has adopted a gold standard in imagination, of which she was in favor in 1865, but how long it will be before she can realise it in fact, when, as we are informed, there is nothing to be seen there at the present day but copper and inconvertible paper money in circulation, remains to be seen

In **Austria** silver was the nominal standard, but in fact she had nothing but depreciated paper money. In 1875, she began seriously to discuss the resumption of cash payments. But the manufacturers and merchants opposed it, imagining that they had some advantages in it in their foreign commerce, and in other respects. But these fancies were refuted, and the Congress assembled to discuss the question strongly reported in favor of a single gold standard, and said that the expense of adopting it would be amply repaid by avoiding the constant losses which the rate of exchange against silver brought with it. After germinating in the Austrian mind for 15 years, a joint Austro-Hungarian Commission in 1892 unanimously reported in favor of a single gold standard for Austro-Hungary, and Laws to carry this into effect have been passed by the Parliaments of both kingdoms. Though how far her entanglement with paper money may retard the full execution of these laws remains to be seen

**Roumania** has adopted a single gold standard

- It has been announced that **Russia** has been accumulating large quantities of gold coin with the view of resuming cash payments with a single gold standard, at some future time—probably at the Greek Kalends

**Canada**, so far as monetary matters are concerned, is a perfectly independent State. Other British colonies are bound to follow the lead of their grandmother in their Coinage. But Canada alone has the right to adopt any system of coinage she pleases,—Bimetallism, or any other. But she resolutely adheres to gold Monometallism. Although her accounts are kept in dollars, her standard unit is the British sovereign, and silver is only legal tender for 10 dollars. And while the United States have been convulsed and tormented with their monetary vagaries,



Canada has enjoyed perfect serenity. With such an example under her very eyes, it is not to be supposed that she will plunge into the folly of Bimetallism

**Persia** has absolutely prohibited the importation of silver by private persons

Now can any rational man suppose that while all these countries, after full experience for centuries of the troubles and disturbances of Bimetallism, have repudiated it and adopted gold Monometallism, they will be moved to abandon their deliberate and deeply considered course, and revert to the exploded chimera of Bimetallism, at the frothy rhetoric and baseless assertions of its advocates?

Bimetallists tell us that it is the abandonment of Bimetallism which has caused these troubles in some countries. But it is exactly the reverse. All the countries which were fortunate enough to take refuge in Gold Monometallism before the terrific down plunge of silver in recent years, have found perfect serenity. While it is only those countries like the United States, which have long been the paradise of currency vagaries, and India, which from the first adopted the wrong metal as her single standard, and missed the grand opportunity, which she had in 1864, of retracing her error and establishing a single gold standard on a sound basis, which have been disturbed

*On the Difference between the Times when Bimetallism was attempted to be maintained, and the Present Times*

**10.** It has been shown that the attempts in former times to maintain Bimetallism, and allowing degraded and debased Coin to remain in circulation along with good Coin, threw all commerce into confusion. But there is a vast difference between those times and the present, when it is proposed to restore the exploded system of Bimetallism

When formerly Princes held it to be a portion of their Divine Right to alter the weight and debase the fineness of their Coin as often as they pleased, and yet to insist that their people should receive the degraded and debased coin at exactly

the same value as good Coin, and when they had at last given up this fancy, and attempted to follow the market value of Gold and Silver in fixing the legal ratio of their Coins, but at the same time issued good Coin without withdrawing the degraded and debased Coin from circulation, merchants and traders had the remedy in their own hands. They at once raised the price of their goods, and even more than necessary, in order to insure themselves receiving a certain quantity of pure metal in exchange for their goods. If the Legislature chose to call a sixpence a shilling, merchants and traders simply charged two shillings for their goods instead of one. They wanted a certain quantity of standard bullion for their goods, quite irrespective of the number of pieces it was contained in. So, though there were many inconveniences to both parties, it was possible for merchants and traders to rub on with such a system. But in those days there were no great Public Debts, and no great Public Banks, which were liable to pay vast sums of a specified metal on demand.

But at the present time the British Government is bound to pay about £27,000,000 in Gold to its creditors every year, and in the aggregate, the Banks in the United Kingdom are liable to pay about £1,000,000,000 in Gold on demand to their creditors: and this contract is binding on both parties: the banks are bound to pay this vast sum, and their creditors are bound to receive this fixed amount, without alteration.

Now suppose that it was seriously intended by Parliament to enact Bimetallism at the ratio of  $15\frac{1}{2}$  to 1, when the natural market rate is 35 to 1, what would that mean? It would simply mean that the State, all Banks, and other Institutions, and all private persons, who were liable to pay 20s. in Gold, should be allowed to discharge their debts with about 10s. in silver. Would the Creditors of the Banks be so blind as to wait for that?

Such an Act could not, of course, be passed and carried into execution in an instant by a *coup d'état*. When Mr. Attwood brought forward his motion to re-establish Bimetallism in 1830, it was recognized that silver had not fallen more than 5 per cent., so that the Creditors of Banks would receive 19s. in the £. What did Mr. Herries, the Master of the Mint, say would be the effect if Parliament were to entertain such a proposal? He said

that it would cause an instant run upon the Banks, so that their Creditors might make sure of being paid their debts in full. He said that such a proposal would make the country bankrupt in 24 hours, and Mr. Huskisson and Sir Robert Peel thoroughly agreed with him

But the case is infinitely more serious now. Silver has fallen not only 5 per cent., but 50 per cent. So that if Parliament were to yield to the advice of the Bimetallists, Creditors of Banks would only receive about 10s. in the £ of their debts. Suppose that the Creditors of Banks were informed that Parliament seriously intended to pass a law that Banks might pay their Creditors with 10s. in silver in the pound, would they not all rush off in a body to demand payment in Gold while they could get it? Thus every Bank in the Kingdom would stop payment in 24 hours

The Creditors of the State could not, of course, demand instant payment in Gold, because their *Rentes* are only payable at fixed periods. But if Parliament were to enact that the State might pay off her debts at 10s. in the pound, it would be simply a **National Bankruptcy**: it would ruin the Credit of Great Britain at a blow: and she would at once descend to the level of Argentina

During all this period of monetary disturbance in the United States, the Government had the legal right to discharge its debts in gold or in dollars—the silver dollar being now worth about 65 cents. But the Government has utterly refused to avail itself of its legal rights. It has invariably declared that it will discharge all its debts in gold, at whatever cost to itself: and it has maintained its resolve all along: nor is there any fear that it will recede from it in future. The United States have infinitely too much respect for themselves to declare a **National Bankruptcy**: and is it possible to conceive that the Government of Great Britain should condescend to a depth of meanness and baseness and fraud, which the Government of the United States have scorned to do, even though it is allowed by Law?

### A Solemn Warning

11. But we are not without solemn warnings. Unlimited issues of Inconvertible Paper Money stand on exactly the same

footing, and obey exactly the same laws, as unlimited issues of Inconvertible Silver. And we have numerous examples of the effects of Inconvertible Paper Money to furnish us with sure guides as to the reasoning about unlimited issues of Silver

Bank Notes payable in cash on demand cannot fall to a discount, for, if they did, the holders of them would immediately go to the Banks and demand money for them, and the Banks would at once pay the penalty of their imprudent issues. But Inconvertible Money is itself an independent measure of value, just like Gold or Silver

During the last century, up to 1793, the Bank managed its issues by a sagacious rule of thumb, and though there were many Commercial Crises, quite as severe as those of this century, there were never any Monetary Panics until 1793, when the Bank abandoned its well tried and safe practical rule of thumb, and ever since 1800 has been managed on *Theories*, every one of which has broken down in practice, and which have produced those terrible Monetary Panics which have been the scandal and the opprobrium of the Economical and Financial statesmanship of the present century

After the suspension of cash payments by the Banks of England and Ireland in 1797, both Banks abandoned their well tried rule of thumb, and adopted the Theory, founded on an obscure sentence in Adam Smith, that they might make unlimited issues of Paper Money, on what they were pleased to term good Mercantile Bills. The Paper Money of both Banks very soon fell to a heavy discount. The depreciation of the Bank of England Notes drew the attention of Lord King and other able writers, and they laid down the Law of Paper Money, which we have designated "Lord King's Law of Paper Money."<sup>1</sup> The Bank of Ireland had made such extravagant issues of Paper Money that its Notes had fallen to a discount of 20 per cent., utterly disordering all the commerce between Dublin and London. A Committee of the House of Commons was appointed on the subject, and issued a Report condemning the Bank of Ireland and its Theories in the severest language<sup>2</sup>

<sup>1</sup>See *post*, Chap. X

<sup>2</sup>See *post*, Chap. XII., Section III

For some reason or another the Bank of England Note recovered much of its value after 1804—perhaps they became more cautious in consequence of the severe condemnation of their Irish sister. But as schoolboys soon forget a severe castigation, the Bank of England soon forgot the vicarious castigation they had received in the person of their Irish sister

1807, 1808, and 1809 were years of enormous speculation. The Bank of England made the most reckless and extravagant issues of Paper Money, on the very same Theory that the Bank of Ireland had done, and the consequence was exactly the same. The Bank Note fell to a discount of nearly 20 per cent., the market, or paper, price of Bullion rose to £4 11s., the Foreign Exchanges fell accordingly, throwing all commerce into confusion. This state of affairs caused the appointment of the famous Bullion Committee, of whose Report we give an analysis below<sup>1</sup>

In the debate in the House of Commons in 1811, the clearest evidence was given that there were two prices for everything, a gold price and a paper price, that a guinea was commonly exchanged for a £1 Bank Note and seven shillings. Nevertheless, the Government brought in a motion that in popular estimation a £1 Bank Note and 1s. were equal to a guinea, and under the influence of party passion the House of Commons voted that 27 = 21. Subsequently an Act was passed making it penal to make any difference between Bank Notes and guineas. But this Act was wholly ineffectual. Freed from all control by the fatuous vote of the House of Commons, the Bank issued paper money more extravagantly than ever. In 1815 the market price of gold rose to £5 10s., and the Bank Note fell to 14s. 6d. Thus an Act, even though sanctioned by penalties, wholly failed to maintain Bank Notes and guineas at par. The consequences of this futile attempt are detailed further on

When the French Convention issued Assignats they soon fell to a heavy discount. The Convention enacted the penalty of death against all those who did not receive the assignats as equal in value to specie. And for all that, the assignat fell to the 36,000th part of its value in specie

Thus it was made manifest that human Laws, even though

<sup>1</sup>See *post*, Chap. XII., Section I

sanctioned with the direst penalties, were wholly ineffectual to control the Laws of Nature

Since then, all attempts have been given up to maintain an equality of value between specie and inconvertible paper money. Does any one now propose to maintain a fixed legal ratio between specie and Russian paper rubles, or Argentine cedulas ?

The very same principles apply to the attempt to maintain a fixed legal ratio between gold and inconvertible silver issued in unlimited quantities by printing so many words in a book

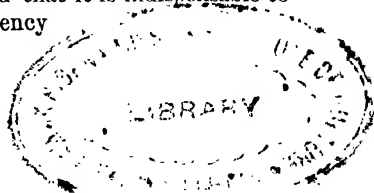
When the Protectionists wished to keep up the price of wheat to 80s. a quarter, they were not so inane as to suppose that they could effect that by simply passing an Act : they took the very practical method of imposing very heavy duties on the importation of wheat, so as *to limit the supply*

The proposal to enact a fixed legal ratio between gold and silver at 1 to 15½, when the natural ratio is 1 to 35 is equally futile ; the only way is to strictly limit the issue of inconvertible silver, as Great Britain and every great state have now done

### *On the Restoration of a Gold Standard to India*

**12.** When some armchair Economists hear of the proposal to re-establish a Gold Currency in India, they are startled and amazed at the vastness of the operation, and some do not hesitate to denounce it as lunacy. But the question is, not what recluse dreamers think about the matter, but what the responsible authorities, and men who are perfectly conversant with the previous history of the case, and the circumstances which brought about the present state of matters, and the present condition of the country, think possible and advisable. After all it is a pure matter of figures. The real question is—What would be the quantity of Gold required to effect this purpose ? and how is it to be obtained ?

Now all those who are responsible for the administration of India, are unanimously of opinion that the present sole legal Silver standard has inflicted incalculable injury, both on the Government and on its commerce, and that it is indispensable to re-establish a Gold Standard and Currency



The only question, then, is—how is it to be effected ?

Some persons have an idea that Silver alone has been from time immemorial the standard of India, that it is impossible to change the ancient habits of the people, and that India is a very poor country, and Silver alone is suitable for her wants. On the other hand it has been stated, on seeming authority, that Gold alone has been the standard of India from time immemorial, and that Silver was first coined by her Mogul conquerors. Both these statements, however, are erroneous. India has been accustomed both to Gold and Silver from the earliest ages. India produces large quantities of Gold, but no Silver. Nevertheless, from prehistoric times, vast quantities of Silver have been imported into her to purchase Gold. The ratio of Gold to Silver in Persia was 1 to 13, while in India it was 1 to 8. Consequently, vast quantities of silver were sent to purchase Gold. The Silver was brought from Tarshish and exchanged for the gold dust of Ophir, which Sir Alexander Cunningham holds to be the country of the Lower Indus.<sup>1</sup> He says that the earliest Indian Coins were small flat pieces of silver, either square or round, and named *Kārsha*. These silver coins are found all over India from Kabul to the mouth of the Ganges, and from the Himalayas to Cape Comorin. There are hundreds of these coins in Indian collections and in the British Museum. This, of course, disposes of the statement that silver was first coined by the Mogul dynasty. What it seems the Moguls did was to be the first to coin rupees.

Sir A. Cunningham says that these square silver coins were current long before the time of Buddha, *i.e.*, in the sixth century B.C., as in his time they were known by the name of "*purāna*," or old coins. He is of opinion that they may be as old as 1,000 B.C.

But Gold was not coined at nearly so early a date. It was found as gold dust, and it was kept in small packets of fixed weight. Job describes the gold of Ophir as "dust of gold."<sup>2</sup> Isaiah says<sup>3</sup>—"They lavish gold out of the bag and weigh silver in the balance." Darius exacted as tribute from the Punjab<sup>4</sup> 360 talents of gold dust, which was coined into Darics. All the

<sup>1</sup>*Coins of Ancient India.* By Major-General Sir A. Cunningham, London, 1891.

<sup>2</sup>*Job XXVIII.*, 6, 16

<sup>3</sup>*Is.* XLVI., 6

<sup>4</sup>*Herodotus III.*, 94, 96, 98

other satrapies paid their tribute in silver. From this Sir A. Cunningham concludes that in the sixth century B.C. the Indians had no gold Coinage

But these vast masses of silver were imported into Northern India, and there was comparatively little silver in Southern India. Up to 1818 gold was the standard in Southern India, with copper for small change. This is a conclusive reply to the allegation that Gold is not suitable for the standard currency of India, as being a poor country. It was only in 1818 that the East India Company made their silver rupee the standard coin in Southern India. It was the East India Company which made silver the sole standard throughout India, when they might just as easily have adopted gold. It was the most disastrous error ever committed by that great Company in their wonderful career

We have next to consider the conditions necessary for re-establishing a Gold Currency in India : they are—

- (1) That the Foreign Exchanges should be in favor of the country
- (2) That it should not be counteracted by the circulation of masses of Inconvertible Paper Money

Now the Foreign Exchanges have been uniformly in favor of India, with scarcely an exception, for 2,000 years, and probably a great deal more

- Even since the earliest days of the Roman Empire, the constant and uniform flow of the precious metals into India attracted the notice of Roman writers. Gibbon says<sup>1</sup> that the natives of the East were content with their own productions and manufactures. But every year 120 vessels sailed for the East, and silver was the only instrument of commerce on the side of the Romans. Pliny says<sup>2</sup> that every year about one hundred millions of sesterces, or about £800,000, in the precious metal were exported to the East. And this influx of the precious metals into India has continued ever since. Even since the demonetisation of gold by Lord Dalhousie in 1852, several millions of gold

<sup>1</sup> *Decline and Fall of the Roman Empire*, Chap. 2.

<sup>2</sup> *Nat. Hist.* XII., 41.



are imported into India every year. The state of the Foreign Exchanges is, therefore, as satisfactory as it can possibly be for the re-establishment of a Gold Currency

Next, with regard to Inconvertible Paper Money—it is like the Bishop's Chapter on snakes in Iceland—"there are no snakes in Iceland"—so there is no Inconvertible Paper Money in India.

It is impossible therefore to imagine a country in a more favorable position for a restoration of a Gold Currency than India.

We have already shown that the demonetisation of gold by Lord Dalhousie in 1853 was soon seen to be a most disastrous error, and that all the public authorities, and public opinion, both British and native, loudly demanded the restoration of a Gold Standard and a Gold Currency. In many districts the natives themselves had organised a Circulating Medium of gold bars, and in the South the natives bitterly complained that sovereigns were not received at the public treasuries. It has also been shown that sovereigns had a very extensive circulation throughout the whole of India, and that public opinion, both British and native, was unanimous in demanding that the sovereign should be adopted as the standard unit throughout the whole country

There never was in any country a movement so weighty and unanimous to change the monetary standard from Silver to Gold, and the attempt to do so in 1864 *only failed because it was tainted with Bimetallism*. It being then perfectly well known why the experiment failed in 1864, it follows that this great reform may now be effected with perfect success

Mr. Hollingbery, an official of the highest ability, and who had the very best official information, estimated that in 1874 the Silver Currency of India amounted to £130,000,000, and that the quantity of gold necessary to restore a Gold Currency to India was most certainly under £60,000,000

Mr. William Douglas,<sup>1</sup> a very high authority, estimates that the silver currency in India in 1892 amounted to about £160,000,000. Without being able to guarantee the absolute accuracy of these estimates within a certain number of millions, they are quite sufficiently so for all practical purposes

<sup>1</sup> *The Currency of India*, London, 1892

So it may, or it may not, be correct within a certain number of millions, that £60,000,000 of gold would be sufficient to restore a Gold Currency to India at the present time, but it is quite sufficient for all practical purposes.

The next question is, where are these £60,000,000, or say £80,000,000, of gold to be got from? Many persons are alarmed at the effect which such a demand for gold might have on the European markets

The answer to this is perfectly satisfactory and conclusive. India would not require to take an ounce of gold from the European markets. She has within her own borders many times as much gold as would be necessary to restore a Gold Currency to her, even supposing that it was much higher than the best conjectured official estimate

When Lord Dalhousie demonetised gold in 1853, it was estimated that £120,000,000 of gold disappeared from circulation and was hoarded away. But it was well known to every one that there were then hoarded away vast quantities of gold. It is known that from 1835 to 1890 there were £131,000,000 of gold imported into India. So that, allowing for any deductions, it is positively certain that there are enormous quantities of gold hoarded away, which have only to be enticed out of their hiding places, on a sufficient inducement being offered, to be transformed into coin

Says Mr. Douglas<sup>1</sup>—"In 1835 it was supposed that the gold then accumulated in the country in various forms—a great portion in the old gold mohurs and pagodas which were legal tender before that date, was equal to about 140 millions pounds sterling. Since then, as already stated, gold equal to about 131 million pounds sterling has been imported and retained, and allowing for exports across the border to Central Asia, it is believed that there is now a stock of gold in India equal to at least 250 million pounds sterling. A recent writer is inclined to put it as high as 300 millions. But this is merchandise and not currency, and hoarding of gold is therefore encouraged. For if exchange were at, say 2s., any one possessing 100 sovereigns, if

<sup>1</sup> *The Currency of India*, 1892

he wished to lend them out at interest, would not be able to sell them for more than about Rs. 1,000, which would be the sum lent in currency. But he might be repaid when exchange was at 1s. 4d., and then his Rs. 1,000 would only buy 66 sovereigns, whereas if he retained his 100 sovereigns till exchange declined to 1s. 4d., he could buy with them Rs. 1,500. *This illustration shows why gold hoarding always takes place in any country with a depreciating currency and gold at a premium*"

This last remark is most pregnant and important. It is universally true. And it must have been proceeding in India, with the constantly falling value of the rupee, at a greatly accelerated rate. So that what with the known importations of gold, and the enormous quantities of it known to be hoarded away, it may probably be reasonably conjectured that the existing stock of gold in India is fully five times as much as would be necessary to restore the Gold Currency, without requiring a single ounce from any foreign source. So that alarm of the scholastic Economists may be quieted

We had some conversations with Colonel Smith, late Director of the Calcutta Mint, who had not the slightest doubt that a gold standard might be restored to India, with the greatest facility : though there were objections to the particular scheme he proposed

Again Mr. Douglas says<sup>1</sup>— " In 1876 the Bengal Chamber of Commerce petitioned the Viceroy, Lord Lytton, to prohibit, or limit, the coining of rupees, but they omitted to point out in what way a gold currency could be introduced, or how the balance of indebtedness in the external trade would be paid. The Government very properly replied *that they could not close the mints to the coinage of silver without at the same time opening them to the free coinage of Gold as legal tender money*

"But in 1878 Lord Lytton's Government itself made a proposal to the Government at home for the introduction of a gold standard and a gold currency." But, of course, it was quashed at home

At last, in 1892, after 14 years of apathy and hesitancy and delay, terrified at the tremendous fall in the value of silver, and

<sup>1</sup> *The Currency of India*, p. 35.

the prospect of the repeal of the Sherman Act by the United States, and the probable deluge of silver that would be poured in on unhappy India, the Government of India sought the permission of the Home Government to close the Indian mints to the free coinage of silver, with the view of the restoration of the Gold Standard and Currency. The Home Government referred the proposal of the Indian Government to a Committee of presumed experts, who with great hesitancy and dubiety agreed to the proposition of the Indian Government, except that the signature of the most distinguished member of the Committee, Lord Herschell, was withheld. Thus, at last, the bold and decisive step of closing the Indian Mints to the free coinage of silver was taken, which ought to have been done at least sixteen years before.

But this is only a half measure. It was avowedly done to prevent the further fall in the value of the rupee, and to prevent the deluge of silver which seemed likely to be poured into India. And in this they have been successful. They have arrested the fall in India itself. But they have not produced stability in the Exchanges, nor can any such measure do so. The impression they conveyed to the public was that this measure would make the exchanges stable at 1*s.* 4*d.* for the rupee. But in this it has wholly failed. The India Council have never been able to sell their bills at 1*s.* 4*d.*; and for some time they refused to sell any bills at all, and to meet their payments due in England, they preferred to obtain authority to raise a sterling loan of £10,000,000 in England. But such a measure cannot be repeated. The Council were at last obliged to give in, and the price of their bills has continued to fall. On the 17th of May, 1894, the Council were obliged to sell bills at 1*s.* 0½*d.* No wonder that every account from India says that the public are getting more and more irritated, and the position is intolerable.

One negative merit, however, the Government have had in the present trouble—they have refused to listen to a word in favor of Bimetallism.

The Government have committed themselves to the restoration of the Gold Standard and Currency, and from that determination they cannot resile. But with the first indispensable measure of

closing the mints to the free coinage of silver, it would seem that their energies are exhausted: they have not given the faintest public indication of their intention of taking measures to effect the indispensable completion of their work by restoring the gold standard. And yet Lord Lytton pointed out in 1876 that the necessary complement of closing the mints to the free coinage of silver was to restore the gold standard

Why, then, is this incomprehensible delay? The Government have the ball at their feet. Their course is clear before them, well buoyed out by the errors of their predecessors. They have gold in profusion at command. The exchanges can never be rendered stable except by the restoration of a common standard unit. Why, then, this delay, to which there seems no end?

Having taken the bold and indispensable preliminary step of closing the mints to the coinage of silver, the crowning of their work is perfectly simple and easy. There are but two subordinate considerations, which must be determined by the advice of experienced persons most conversant with the conditions of the country. These are—

(1) What should be the ratio fixed between the sovereign and the rupee?

(2) Should the rupee continue to be legal tender to an unlimited amount, as at present? or should it be limited

With respect to the first of these questions, the Government may fix the ratio at any figure they please, which will draw forth the gold from its hiding places to be brought to the Mint to be coined. If the coining of silver as a subsidiary coinage be strictly limited, the subsidiary silver coinages of England, France, Holland, and other countries show what a wide margin may subsist between the rated and the market value of the Coins. On this point, therefore, there is no difficulty. It would seem to be expedient to fix the value of the sovereign somewhere about 6 or 8 per cent. above the market value of silver

With respect to leaving the silver rupee as unlimited tender, or limiting it, we have the examples of England on one side, and France and Holland on the other. In England, not only is silver limited in amount, but it is also limited as legal tender. In

France and Holland silver is limited in amount, but it is not limited as legal tender. Mr. Douglas, a very high authority, considers that the limitation of silver as legal tender in England is unnecessary, and that it is sufficient to limit it in amount, but it is not probable that Parliament would consent to alter the present system in England. But the examples of France and Holland certainly seem to bear out Mr. Douglas's opinion. Which system would be most suitable for India must be determined by the advice of the most experienced Indian experts.

At all events the stability of exchange, which is the principal point to be considered, is perfectly secure on either system, as may be seen in the case of France. Although five franc pieces are unlimited legal tender within the country, the foreign exchanges are settled in Gold. And to preserve stability in the exchanges, it is only necessary that the unit in which the exchanges are settled should be the same. The state of the subsidiary or complementary currency has no effect on the exchanges. At the present time the foreign exchanges of France are in perfect order.

One thing, however, is positively certain, that it will never be possible to maintain a stable rate in the exchanges between England and other gold using countries, and India under the present imperfect and uncompleted system. It was proved before the House of Commons that it is not possible to maintain a stable exchange between countries which do not use the same metal as their standard; and there can be no Monetary Peace between India and England until the Gold Sovereign is made the single standard unit throughout the whole Empire.

Mr. Douglas concludes in these scathing and bitter, but o'ertrue words—"All these attempts to give India a whole and sound currency have been steadfastly overruled by the authorities at home. The Home Government has been in the habit of passing on the Indian proposals to the consideration of Committees, consisting of irresponsible theorists, or men under London monetary and Stock Exchange influences. The fixed idea of the latter is, that the United Kingdom is really the only country that should have a gold standard, and that silver is good

enough for all the rest of the world. They tried hard, but tried in vain, in 1872, to prevent Germany from introducing the gold standard, and France from discarding bimetalism. They found, however, the financial statesmen of both countries keenly alive to what the best interests of their people demanded, and by no means to be cajoled into thinking that what was good for the United Kingdom should not also be good for them: and it is all the better for our own country that Germany and France, in recent years, have had an equally sound currency with itself: just as it has been a great evil to us, and a still greater evil to the Indian people, that their currency has consisted of a discarded and depreciating metal. But although the London financial "*octopi*" were unable to stop the action of France and Germany in the right direction, most unfortunately India, through the statesmen in Downing Street ultimately responsible for the direction of her affairs, has been within their power and influence. Up till now they have prevailed in maintaining a state of things in which gold is held to be the right standard for ourselves, but the discarded and depreciated silver of the rest of the world good enough for our great dependency. The Committees referred to did not, as a rule, contain a single banker, a single merchant, a single manufacturer connected with the Indian trade, or any one really representative of the Indian people, or any one with sufficient practical knowledge to enable him to guide the application of sound currency principles to the special circumstances of the case: yet the Home Government sheltered themselves behind their opinions in refusing to sanction the change recommended. This comes out particularly clear from the way in which the Indian proposals of 1878 were dealt with. Those, therefore, responsible for the continuance of the cruel wrong inflicted on the Indian people in the matter of their currency, are not the Viceroy's Government, but the authorities at home."

Nor is this merely individual mercantile opinion, however high, but the *Times* correspondent, as embodying general public opinion in India, writes home 21st May, 1894—"The opinion is freely expressed on all sides that the Secretary of State has allowed himself to be made the tool of persons who sought from

the first to thwart the measures adopted last June. Even the opponents of these measures admit that they have not had fair play. The situation is most critical. Even if the cotton duties are imposed, they will go but a little way towards meeting the deficit which is now inevitable, and what is still more serious, a bitter feeling is universal that the India Office has betrayed its trust, and, by subservience to the selfish interests of Lombard Street and Manchester, has done more to shake the British Empire in India than anything which has happened in this century."

Is not this expression of independent public opinion sufficient to rouse the Government from their torpor?

The whole of this unhappy India business for 20 years is an everlasting stigma on the British Economic and Financial Statesmanship of the nineteenth century

### *On the Alleged Scarcity and Appreciation of Gold*

**13.** In these discussions a most nonsensical expression has come into vogue. The Bimetallists constantly speak of the *Appreciation* of gold, meaning that, from an alleged scarcity of it, it has risen in value

Now even if it were true that there is a scarcity of gold, to speak of it as "appreciation" is absurd. Appreciation means estimating a thing at its true value. If a great poet or philosopher is said not to have been appreciated by his generation, it means that they did not estimate him at his true value, or merit

It has become very usual to speak of the *Depreciation* of silver, meaning the fall in its value. But this is quite inaccurate. Depreciation means that a thing is not of the value it professes to be. Thus, if shillings become below their legal weight by wear and tear, or by clipping, or other bad practices, or if coins are debased in their fineness below the legal standard, and are still allowed to pass current, they are said to be *depreciated*. But if a fall in the value of silver takes place from natural causes, it is not *Depreciation*, but a *Diminution in value*, as we have already pointed out

So if a Bank Note, which professes to be of the value of 20s.,



is only really of the value of 14*s.* 6*d.*, it is depreciated because it is not of the value which it professes to be of

But to speak of any supposed increase in the value of gold from an alleged scarcity of it as *appreciation* is absurd

But the alleged scarcity of gold is purely mythical. It exists only in the imagination of the Bimetallists. The earth teems with gold. The supply of it is constantly increasing, and new sources of its production are being discovered every day. Indeed, the *Times* of 22nd May, 1894, says—"The world's supply of gold now seems excessive." We can hardly take up a paper without reading of new fields of gold being discovered: and after making every allowance of a heavy discount for the rose-coloured pictures of correspondents and the cunning wiles of company promoters, *et hujus generis omnis*, there can be no reasonable doubt that, within a short period, we may expect an increase in the annual production both of gold and silver only inferior, if indeed inferior, to that which took place on the conquest of Mexico and Peru, and the discoveries in California and Australia.

The alleged rise in the value of gold is supposed to be proved because a certain number of commodities have fallen in price. But in fact, the fall in the price of these commodities can be fully accounted for in the change of the conditions of the productions themselves; and if some commodities have fallen in price, there are many others which have not fallen. Besides, the price of many commodities depends upon the condition of trade far more than the state of the currency, and has nothing to do with any amount of gold

Among other things the price of that mighty department of Economics, named Labor, has not fallen, except perhaps in some few isolated instances. On the contrary, wages generally have risen

But the most decisive example is that which is usually called the Money Market, or, as it ought more properly to be called, the Credit Market, as we have shown further on

In recent times discount has often fallen to  $\frac{1}{2}$  per cent. It is most commonly between  $1\frac{1}{2}$  and 2 per cent., and it very seldom now rises to 3 per cent. in this country. On the 21st of May, 1894, the nominal Bank rate of interest was 2 per cent., the

market rate of interest was  $\frac{3}{4}$  to 1 per cent., and the price of the  $2\frac{3}{4}$  Consols was  $100\frac{1}{2}$ . This shows that  $2\frac{3}{4}$  per cent. is now considered the usual average rate of interest in this country. How could that possibly be if there was really a scarcity of gold as alleged? In the days of Charles II., when gold was really scarce, the usual rate of interest was 10 per cent.

This alleged scarcity of gold is a pure delusion, and exists only in the imagination of the Bimetallists, and is only a cry got up by them to beguile the public into their schemes of Bimetallism. How can gold be scarce when any amount of Credit can be procured on good security at 1 per cent.? Such an assertion confutes itself among all persons who really understand business. It all arises from ignorance of the principles and mechanism of our colossal system of Credit. And on this subject the common text books on Economics are simply worth nothing at all. Adam Smith, Say and Mill admit that Credit has exactly the same effect on prices as money itself. Smith classes Bank Notes, Bills of Exchange, &c.—which are all **Credit**—as Circulating Capital. Say begins by including Instruments of Credit under the term **Wealth**: and has given some notices of their use in commerce. Mill admits that Bank Notes, Cheques, Bills of Exchange, &c.—which are all **Credit**—act in the same way, and perform all the functions of Money. He also admits that a promise or order to pay—*i.e.*, a **Credit**—issued by a solvent merchant or banker is of the same value as gold. He also admits that Credit produces the same effects on prices as money. But beyond these few perfunctory sentences, these writers have no more conception of the great juridical and scientific principles and mechanism of the colossal system of Credit, than so many children of six years old have of the triple expansion engines of the *Cumpania*

The rock upon which the Bimetallists, and almost all persons without exception who bemuse themselves and their readers by chattering about the Currency, or Circulating Medium, founder is that Gold and Silver only constitute the Currency, or Circulating Medium, and the Measure of Value, or Prices. And that prices are governed solely by increasing or decreasing quantities of Gold and Silver. That doctrine might possibly have had some appearance

of truth several hundred years ago, but at the present day it is utterly exploded, and out of date. In this and other great mercantile countries, such as the United States, where there is a regularly organised system of Mercantile Credit and Banking, Gold and Silver do not form more than 1 or 3 or 4 per cent. of the Currency, or Circulating Medium, and Measure of Prices

Even in the most common books on Economics it may be seen that it is admitted that Credit, in various forms, has exactly the same effects on production and prices as an equal quantity of Gold and Silver, though the writers never had any conception of the stupendous effects of this admission

We have in fact passed through the ages of Gold and Silver, and left them long behind us. This is the age of **Credit**, or **Paper** : and no one who does not study and thoroughly comprehend the principles and mechanism of the colossal system of Credit, Mercantile and Banking, can form the most distant conception of the effects of an increased or decreased quantity of Gold and Silver on prices, and is not justified in writing on the question

The great difficulty in imbuing the minds of students with the true principles of Credit consists in the elementary notions which the common text-books on Economics instil into the minds of their readers. They allege that all Wealth is the produce of land, labor, and capital, and that Labor is the cause of all Value : though they abound in flat contradictions of such doctrines. When students, therefore, whose minds have been filled with these elementary ideas, see gold sovereigns and silver shillings, they readily admit them to be wealth, because they are the products of land, labor, and capital. But when they are told that Rights of action, *i.e.*, Credits, or Debts, are Wealth, for exactly the same reasons, and under the same conditions that Gold and Silver are Wealth, they are startled and shy at such a doctrine

The solution of the whole difficulties which perplex and confuse Economics at the present day, is to revert to the original and unanimous doctrine, which the ancients held for 1300 years, that **Exchangeability** is the sole essence and principle of Wealth, and that everything is Wealth which is exchangeable, or which

can be bought and sold, no matter what its nature or its form may be ; and that **Demand** is the sole cause of Value

As pointed out in the dialogue Eryxias, cited above, metallic money is wealth only in those places and at those times in which it is exchangeable, or can purchase other things. Wherever and whenever it ceases to be exchangeable, or has lost its purchasing power, it ceases to be Wealth

But the Promise to pay of a solvent merchant or banker is equally Wealth, as even Mill himself admits, because it will be paid or purchased in money by the issuer at maturity. The Bank of England stamps a piece of paper with the promise to pay £100 on demand. This Note has Value, and is Wealth, because the Bank is ready to purchase it with 100 sovereigns at any moment the holder of it pleases

Moreover, if persons would study any elementary text-book of Jurisprudence before they write on such a subject as Credit, they would see that Rights of action, such as Credits, or Debts, as well as other species of Rights, are saleable commodities, just like Gold and Silver. Thus the famous Roman jurist, Ulpian, says—“ We are accustomed to buy and sell **Debts** payable on a certain day and at a certain event. Because that is Wealth (*Res*) which can be bought and sold.” So in Roman Law, Credits or Debts (and other rights) are termed *Pecunia*, *Bona*, *Res*, *Merc.* : in Greek Law, χρήματα, πράγματα, οὐσία, ἀγαθά, οἶκος, &c. : and in English Law, Goods, Chattels, Merchandise, vendible commodities, incorporeal property, incorporeal wealth

Thus the whole mass of existing Rights of action, Credits, or Debts, in this or any other country, is a gigantic species of Exchangeable Property, just like Gold, Silver, corn, timber, manufactured goods, or any other material chattels

The superlative importance of this is, that in this country all commerce and trade is carried on by the Creation, the Circulation, and the Extinction of these saleable commodities termed Credits, or Debts, and not by Gold and Silver. By the usage of trade, ready money in the City of London means a three months' bill. And these Rights of action, and other Rights, form articles of export and import between country and country, and affect the Foreign Exchanges, exactly in the same way as material commodities do

The fact is that the value of Gold is determined not by the quantity of Gold alone, but by the aggregate of Gold and of all Credits payable in gold—which may be termed Gold Credits.

The value of Silver is determined not by the quantity of Silver alone, but by the aggregate of Silver, and of all Credits payable in Silver—which may be termed Silver Credits.

And the market ratio of Gold to Silver is determined not by the quantity of Gold and Silver alone, but by the ratio of the aggregate of Gold and all Gold Credits to the aggregate of Silver and all Silver Credits.

Another delusion which obscures the comprehension of this subject is that which the concoctors of the Bank Act of 1844, and many scholastic Economists, hold, that all Bank Notes, Bills of Exchange, Cheques, &c., are always actually paid in money, because they are expressed to be payable in money. We have shown that there are three other methods by which obligations are extinguished, besides payment in money.<sup>1</sup> And at the present day it is probable that, in this country, not one Bill of Exchange in 500,000 is ever paid in money, but by the other methods we have described.

Another delusion which obscures the comprehension of this question is the exploded fallacy, propagated by such obsolete books as *Gilbart on Banking*, that the function of a bank is to “borrow money from one set of persons and to lend it to other persons.” Banks never “lend” out money. They buy Money and Debts payable at a future time, by creating in exchange for them Debts of their own payable on demand, which in the technical language of modern banking are termed **Deposits**. As Mr. Cazenove rightly said—“It is these Banking Credits that are the loanable capital.”

And these Deposits, or Banking Credits, exceed several times the quantity of specie the banks find necessary to hold in reserve. The sole and express purpose of banks is to issue Rights of action, Credits, or Debts, which preserve their value with specie by the banks always taking care to hold such a quantity of specie,

<sup>1</sup> See chap. III., sect. IV., *supra* and chap. XII., *infra*

that their creditors may feel assured that they can get money for them on demand. The express function of a Bank is to augment or increase the Currency, or Circulating Medium, of the country : and so, as every writer who understands the subject has said, to increase the Circulating Capital of the country. As Bishop Berkeley said 150 years ago, a Bank is a Gold Mine

Bills of Exchange are paid in this country, not by Gold, as is so often supposed, but by the constant creation of new Banking Credits, as we have fully explained further on<sup>1</sup>

The amount of these Deposits, or Banking Credits, created by all the Banks in the United Kingdom, approaches to about £1,000,000,000. And they have exactly the same effects on production, prices, and the rate of interest, as an equal quantity of Gold and Silver. They are for all practical purposes now the Current Coin of the realm

It is the immense power which our leading Banks have of creating these Deposits, which has reduced the rate of interest to 1 per cent.

To use a homely illustration, the vast amount of Credit, by means of which all commerce and trade is now carried on, may be compared to a schoolboy's humming top, which, however large it is, revolves on a very minute axis. At the present day Gold is nothing but the minute axis upon which the whole of the colossal system of Credit revolves

However, as the purpose of this work is to give an exposition of the principles and mechanism of the organisation of our system of Credit, we cannot say any more about it here, but must refer any of our readers, who care to inquire into it, to the preceding and subsequent chapters

All this shows how utterly futile is the cry raised by the Bimetallists of the Scarcity and Appreciation of Gold

#### *On the Effects of establishing a Fixed Ratio between Gold and Silver by International Agreement*

**14.** Let us however exert a strong effort of imagination, and suppose that all the wide yawning crevasses and Himalayan

<sup>1</sup> See *infra*, chap. XII.

mountains of obstacles were surmounted, and a meeting of all the wise men of the earth, gathered together from the East and the West, from the North and the South, were to meet in solemn conclave to establish a fixed ratio between Gold and Silver by International Agreement—What is the ratio to be?

Bimetallists tell us with the lightest of light hearts that the Ratio to be fixed upon is of no consequence—the merest matter of detail. The thing to be done is to fix upon *some* or *any* Ratio.

But is the Ratio to be fixed upon such a mere bagatelle, such a matter of mere detail? If, by the wildest effort of imagination, and the strangest freak of fortune, such a meeting were ever to take place, the Bimetallists would find in it their Sedan

Now let us examine the effects upon England and France of fixing on a Ratio

The *fanaticissimi* of Bimetallists contend that the old ratio of 1 to 15½ should be fixed upon

Now what would be the effect on England of establishing such a Ratio?

The simple effect would be that all debtors—the Government, all Banks, all merchants and traders, all Corporations and Institutions which have contracted to pay 20s. in gold, would be allowed to discharge their obligations with 10s. in silver—which simply spells **Universal Bankruptcy**. Would England ever agree to establish such a Ratio?

The less *fanatici* of Bimetallists contend that the Ratio should be fixed at some point more in accordance with the present relative market value of gold and silver

The present Ratio of gold to silver is about 1 to 35

The Bank of France has at present in reserve an enormous mass of silver which is valued at £50,000,000

But how is this mass of silver valued at that sum? Simply by retaining the obsolete and imaginary ratio of 1 to 15½, and rigorously closing its Mints to the free coinage of silver

French five-franc pieces, which are now legal tender to an unlimited amount, are in reality as much token money, as our shillings are, whose present market value is somewhat less than 5*d.* The market value of the silver in the French five-franc pieces is somewhat less than 2½ francs

If the French mints were opened to the free coinage of silver at the present ratio of 1 to 35, the Bank of France would instantly lose about £28,000,000 in value of its assets. Every debtor in France would be allowed to pay off his debts in five-franc pieces worth about  $2\frac{1}{4}$  francs—which simply spells **Universal Bankruptcy** for France. Does any human being suppose that France would ever consent to establish such a Ratio?

But the fact is that France cannot stir a step from her present position in the direction of Bimetalism without bringing on a **National Bankruptcy**. Even supposing that all the world should agree to adopt Bimetalism at the ratio insisted upon by the keenest French Bimetalists, *i.e.*,  $15\frac{1}{2}$  to 1, it would not have the slightest effect on the Laws of Nature. The value of the five-franc pieces would at once descend to the market value of silver, notwithstanding all the cobwebs of International Agreements. And that spells National Bankruptcy. France is therefore firmly and immovably fixed in her present position.

Thus, supposing this conclave of wise men to meet to establish a fixed ratio between gold and silver by International Agreement, the very first proposal to take a definite ratio would shatter it to atoms like a bombshell of dynamite, amid universal laughter—never to meet again to embark on such a wild goose chase.

So much for the contention of the Bimetalists that the fixing of a ratio by International Agreement is a mere insignificant matter of detail.

The fact is that the great fundamental Law of the Coinage, first demonstrated by Oresme, Copernicus and Gresham, that Inferior Coins and Superior Coins cannot, in the nature of things, circulate together in unlimited quantities, which has been found to be true in all ages and countries, and which has been accepted as true by all sound Economists, is not confined to single and separate countries, any more than the Law of Gravitation, or the Laws of Optics are. These, when once demonstrated in any one country, are found to be true throughout the whole world.

So the Law of the Coinage in question was demonstrated in France by Oresme, in Poland by Copernicus, and in England by Gresham, quite independently of each other.



Its terms are perfectly general and universal; they are not limited to single States, nor by Time nor Space: they are absolutely true, through however large an area they operate—throughout the whole world as well as in each separate State. If the whole world were to agree to fix a legal ratio between Gold and Silver, which differed from the general market rate, the same consequences would follow throughout the whole world, as have been invariably found to follow in every separate state—*The Superior Coin would infallibly be driven out of circulation, and the Inferior Coin only would remain*

Bimetralists sometimes allege that the Law of Oresme, Copernicus and Gresham only operates to cause the exportation of the Superior Coin to foreign countries, and they ask—If all countries were to agree to one fixed ratio, to what foreign countries could the Coin be exported?

But they fail to observe that there are two other modes of disappearance besides being exported—

1. Simply by hoarding away; as has happened in every country where Bimetalism has been established

2. Melting down the Coin into Bullion. If the value of the metal in Coin falls below its value in Bullion, it is at once melted down into Bullion

These two methods of disappearance do not necessitate any exportation of the metal

The notion, then, that it is possible to fix a legal ratio between Gold and Silver by International Agreement, any more than States can do so separately and singly, is a vain delusion and a pure chimera. It is no more possible to bind Gold and Silver together by International Agreement than it is to tie the planets together by packthread

Or, by International Agreement to suppress volcanos, earthquakes, tornados and typhoons

Or by International Agreement to compel the waters of the Ganges to flow back from the Sonderbunds to the Himalayas

### *Three Forms of Bimetalism*

15. There are three Forms of Bimetalism—

1. Where an unlimited number of Coins of gold and silver

are issued of a fixed weight, fineness and denomination, but at no fixed legal ratio attempted to be made between them : but they are left to find their own level, or market value, in public use

This was the state of India in 1766. There were then 283 different kinds of gold coin, and 711 different kinds of silver coin in circulation, of different weights and fineness : they were constantly fluctuating in value. No one knew the value of the coins in his possession, and in the most ordinary transactions, a shroff, or professional money changer, was obliged to be called in, as he alone knew the value of the different coins, and he took care to profit thereby. All the moneys paid in to the public treasuries had to be valued by a shroff

Such a system of coinage was tolerable under the absolute despotism of the Mogul dynasty, where the taxes were laid on the ryots, and there was extremely little commerce and no banking

But it was intolerable under a civilised Government, and the extension of commerce and banking. It then became indispensable to have some fixed unit of payment

How could Bills of Exchange be paid by bags of miscellaneous coins, each one of which required a separate valuation ? How could sums paid into or out of a bank in quantities of miscellaneous coins be valued ? It would require a shroff to intervene in every single transaction between banker and customer. It was this very thing which caused the Banks of Venice, Amsterdam, Nuremberg, Hamburg, and many others to be founded, to establish a fixed standard of payment in all commercial transactions. The East India Company found this system absolutely intolerable, and endeavored to establish a system of Bimetallism, by fixing a ratio between Gold and Silver Coins, to remedy it, but it turned out a complete failure

2. One Coin may be made the sole legal standard, and coins of other metals may be allowed to pass current at their market value with respect to the standard coin. This system prevailed in India from 1835 to 1853. But it is open to the obvious objection that these auxiliary coins may fall greatly in value, and so the holders of them may sustain great losses

It was the fear of this that made Lord Dalhousie demonetise

gold at a week's notice in India, and order the Public Treasuries to receive no gold

Under each of these systems Gold and Silver Coins may circulate together in unlimited quantities, but the practical inconveniences are so great, that they become intolerable

3. It may be attempted to maintain Gold and Silver Coins in unlimited quantities at a fixed legal ratio. But the experience of centuries in every country has shown that this is absolutely impossible. It has been proved by uniform experience, that the relative value of the coins is governed by the relative market value of the bullion, and that when the market value of the metals in bullion differs from the fixed legal ratio of the coins, the coins made of the metal which is overrated invariably drive the coins made of the metal which is underrated out of circulation, and alone remain in possession of the field

The East India Company had full experience of each of these three forms, and found them each and all impracticable and impossible, and then, taught by the hard logic of facts, finally denounced and renounced Bimetalism and all its woes, and adopted **Monometalism**—*Expertæ crede*. Most unfortunately she adopted Silver instead of Gold, which she might have done with the greatest ease, and thus has brought on our present troubles

### *The True Principles of a Coinage*

**16.** The Circulating Medium or Currency of the world consists of Specie, Gold, Silver and Copper, and **Credit** in all its forms, both written and unwritten

The facts detailed in the preceding sections and the arguments of the illustrious writers we have cited, demonstrate beyond the power of contradiction that the following are the true principles of a Coinage—

1. That the Coin which is to be the standard unit of Money, the measure of the value of all property, and the instrument of Commerce, should be made of **One** metal only—that it should be

coined in unlimited quantities—and absolutely free from all charge, so as to preserve exactly the same value as uncoined Bullion—and that it should be Legal Tender to any amount

2. That Coins of any other metals which are issued should be purely subsidiary, and kept strictly under the control of the Government. That a certain seignorage should be taken out of them partly to defray the expense of the coinage, and partly to maintain their value above that of uncoined Bullion. That they should only be issued in limited amounts to meet the wants of the people for small change—and that they should be Legal Tender only for very small amounts

If these conditions be observed, the market value of the metals of which the Coins are made may fall very considerably below the rated value of the Coins without producing any ill effects.

Thus in 1817, when our present system of Coinage was established, the seignorage taken out of the Silver Coinage was estimated to raise their value about 6 per cent. above that of Silver Bullion, but, according to the present market ratio between Gold and Silver, the value of the Shilling is more than 50 per cent. above its value as bullion. And there have been no disturbances, because their amount is strictly limited, and they are only legal tender to the amount of 40s.

The same arguments apply to our Copper Coinage

So also the current five-franc pieces in France are in reality only worth about  $2\frac{1}{2}$  francs, according to the relative market value of Gold and Silver. But the mints are closed to the free coinage of silver, and so their quantity is strictly limited

Thus the value of the subsidiary Coins is maintained at the level of the value of the standard unit

3. Banks should have no legal limit on their creation of Banking Credits—as they have not at present—nor upon the methods by which they find it most convenient to circulate them, either Bank Notes or Cheques. At the present time the amount of Banking Credits allowed to be circulated by Notes is strictly limited by law; but the amount of Banking Credits allowed to be circulated by Cheques is absolutely unlimited. This distinction between Cheques and Notes is mischievous and absurd: because Cheques and Notes are identical instruments. Their sole use is to

circulate Banking Credits which have been previously created : and the real danger lies in the excessive creation of Banking Credits, upon which the Law places no limits—and not in the instruments by which they are circulated

In order to preserve Banking Credits at their par value with the standard Coin, they should be convertible into that coin on demand ; and to prevent an excessive quantity of them being created, and so driving specie out of the country, the **Rate of Discount** should be strictly adjusted by the state of the Foreign Exchanges and the amount of Bullion in the Bank

If these rules be strictly observed, the whole Circulating Medium, or Currency, of subsidiary specie, and the supplementary currency of paper, may be kept at par with the Standard Unit

If the Standard Unit be kept its full legal weight and fineness, the state of the subsidiary and supplementary Currency has no effect on the Foreign Exchanges

In 1697, owing to the debased state of the Silver Coinage, which was then the Standard Unit, the Foreign Exchanges fell 25 per cent., and owing to the suspension of cash payments by the Bank, its notes fell to a discount of 20 per cent.. But as soon as the new Silver Coinage was issued, the Exchanges were immediately rectified, although Bank Notes continued at a discount of 20 per cent.

So at the present time, the fact that the Silver Coins are 50 per cent. below their rated value has no effect on the Exchanges

### Conclusion

**17.** We have now laid before our readers a succinct, but sufficiently full, account of the historical facts, and the arguments of a series of illustrious men for five centuries, upon which the modern system of Monometalism is founded, so that Monometalists may know how it is to be defended, and Bimetralists may know the facts and arguments which they have got to meet and confute, before they can hope to overthrow it

That there is at the present time a very severe commercial depression throughout the world is indisputable. But when we think of the millions of armed men in Europe at the present day

withdrawn from productive employment, and eating their heads off—when we think of the rigorous system of Protection, which seems to be getting more severe every day, by which most nations are walling themselves in, impeding the free course of international exchanges which conduce to their wealth and prosperity—when we think of the Currency and Tariff vagaries of the United States, which have produced in that country a crisis more severe and prolonged than any since 1837, and of which we are far from seeing the end yet, while the factions in Congress are fighting each for its own presumed private interests, without a thought for the general good of the country, and while these conflicts last paralysing all business, and while foreign capitalists are withdrawing their funds from a country ruled on such anarchic Economic principles—when we think of the shameless traffic in Foreign Insecurities promoted by firms which were once the Princes of British commerce, but which are now righteously lying low in the dust—when we think also of the Liberator and other similar scandals, which have brought misery and ruin into countless numbers of private families, so that they are obliged to limit their expenditure to the barest necessities of life—when we think of the number and the magnitude of the strikes brought about very much by restless agitators ignorant of the very rudiments of Economics—and when we have as a counterstroke what has been aptly termed the Strike of Capital, namely, Capitalists, harassed and terrified by these incessant strikes, withdrawing their capital from the productive employment of labor, and investing it only in first-class securities at the lowest rate of interest—when we think of the refusal of Capitalists to invest in reproductive works in India, while the apathetic Government has seen the rupee continuously falling before its eyes without taking the necessary steps to reform the Monetary system of India, which can alone bring back confidence to Capitalists—we should have thought that these circumstances were sufficient to account for all the present *malaise*

But to the Bimetallists all these things are as nought—mere trifles, light as air. They are all due to the want of Bimetallism, and if only Bimetallism could be restored it would act like Aladdin's lamp, and bring boundless prosperity to the world

Nevertheless, just as we were induced to believe that the Sun of wealth and prosperity, bringing healing on its wings, was about to rise on a suffering world, it suffers, alas ! a disastrous eclipse

For all these bright visions are based upon the pertinacious assertions of the Bimetallists,—“that it is possible by International Agreement to regulate the Value of Gold and Silver.” But the uniform facts of Monetary history, and the unanimous arguments of all competent authorities for five centuries, give the most positive and conclusive *démenti* to this assertion. It is a pure fiction of the brains of the Bimetallists, who have yet to learn the very first principle of Inductive Philosophy, that in order to conquer nature, we must begin by obeying her. The Bimetallists have plunged themselves, and all who believe in them, into a fathomless quicksand. “There let them lay,” as Byron would say.

The Bimetallists assert that by establishing a Fixed Ratio by International Agreement between Gold and Silver, both metals may be kept in circulation in unlimited quantities, and so may increase the Circulating Medium of the World. But all experience proves that this is a hopeless delusion. The uniform result of attempting to make Gold and Silver circulate together in unlimited quantities at a Fixed Ratio has been that the one metal drives out the other according as it was overrated or underrated. The *two metals simply displaced each other alternately*: and there was no increase of the Currency

Now what would be the infallible result if the Bimetallists had their way, and Gold and Silver were coined in unlimited quantities at the ratio of 15½ to 1 ? The first result would be **Universal Bankruptcy** ; then Gold would entirely disappear from circulation throughout the world, and Silver would be the only Metallic Currency

The Bimetallic heresy was, we believe, hatched in the brains of some French Economists, and if it were carried out, what would be the inevitable consequence to France ? If we are rightly informed, there is no Gold in general circulation in France. The sole metallic Currency consists, as it used to do, of those dreadful five-franc pieces, or cart-wheels, as the Americans call them. The Bank of France holds more than 50 millions worth

of Silver. The general Silver currency of France in five-franc pieces cannot be estimated at much less than 200 millions. Now suppose that the French mints were opened to the free coinage of silver at  $15\frac{1}{2}$ . All this mass of Silver currency would instantly fall to its market value, it would lose more than half of its rated value. The Bank of France would lose more than 28 millions, the public holding the five-franc pieces would lose little less than 100 millions. If, as we believe, the French *Rentes* are paid in silver, the *Rentiers* would lose more than half their income. That means instant **Bankruptcy** and **Ruin** to France. She would lose more than half the penalty she had to pay for the Franco-German war

It would mean exactly the same to England and every other European State, and the United States

Now as the internal Currency of France is entirely silver, it follows that opening her mints to the free coinage of silver at any ratio whatever means instant **Bankruptcy** and **Ruin**. France is therefore bound by the heaviest bail of solvency to abstain from all contact with the unclean thing. And this fact alone will scatter all the hopes of the Bimetallists to the winds

Hence Bimetallism at the ratio of  $15\frac{1}{2}$  to 1 means instant **Bankruptcy** and **Ruin** to every great Commercial State

Surely the net is spread in vain in the sight of any bird

But supposing even that the market ratio of Gold to Silver of 35 to 1 were adopted. What amount of Silver would be required to replace the Gold Coinage of England? The most authentic estimate places our Gold Coinage at about 90 millions. A high authority has stated that a million in gold weighs about 10 tons. Therefore our present Gold Coinage weighs about 900 tons. At the ratio of 35 to 1 it would require 31,500 tons of silver to replace our Gold Coinage! Assuming that the Bank of England keeps a low average of 20 millions in gold, that weighs 200 tons. To replace this in silver would require 6,000 tons! Other Banks would require a proportionate amount. Every person who carries a bright little sovereign in his pocket would have to carry four huge cartwheels. And how long would it take to coin 31,500 tons of silver? The whole thing is so monstrous,



that it only requires to be stated to be at once dismissed as a vain chimera

Governments have no business to concern themselves with keeping up the price of silver rather than that of wheat or any other commodity, making themselves the tools of private persons. Their sole business is to provide the best Monetary system possible for the general good of the country. And that is by having Gold as the standard unit, and issuing silver as a subsidiary currency, in such limited quantities as the wants of the people may require, on such principles as may maintain its value at par with gold

The fact is that all attempts by Governments to bolster up the price of Silver have proved dismal failures. The United States, France, Germany, Italy, all tried to issue trade dollars for circulation in Asia and Africa, but they were universally rejected, and have ceased to be issued.<sup>1</sup> The notorious failure of the Bland and Sherman Acts in the United States need not be further noticed

There is no method so sure and powerful of augmenting the elastic Currency of a country, expanding and contracting exactly so as to meet the wants of the people, and at all times maintaining it at par value with the Standard Unit, as the institution of a solid system of Banking, of which we have set forth the complete mechanism further on. It will be seen that the express function of a Bank is to create and issue **Rights of action, Credits, or Debts**, which circulate as money, and produce all the effects of an equal quantity of gold. It is these Banking Credits which do the real work of the country. The Banks have only to maintain such reserves of gold as may assure the public of their being able to redeem their Credits on demand. What India wants above everything is the extension of a solid system of Banking. Of course this must only be gradual, and it is most dangerous to hurry it on too rapidly. But what is wanted is to diffuse a knowledge of the real mechanism of Banking and of its powers, and to promote banking habits among the people as far as possible. It is the extension of a solid system of Banking that India wants, and not the fantastic fooleries of Bimetallism. It may not be

<sup>1</sup> *The Monetary Question in 1892.* O. Haupt, London, 1892

possible to arrive at such a development of banking in India as exists in Scotland for ages to come ; still, it is the end to be kept in view. Two hundred years ago Scotland was the poorest of poor countries : but she devised the most perfect system of banking in the world. She has executed a series of magnificent public works of all kinds, and never had to cross the border for a penny. She has done it all by her **Banking System**. If India had such a banking system as Scotland she would never require an ounce of foreign capital. If she had such a system she might multiply her canals and railroads, and develop her agriculture, her manufactures, and her other resources of every kind, and multiply her wealth many times : and also reduce the exorbitant interest charged by the native money lenders to the unfortunate cultivators of the soil

The Bimetallists probably build their hopes of success on the precedent of the Anti-Corn-Law League. But the two cases are wholly different. After an immense agitation, the Anti-Corn-Law League succeeded in crowning the progress of Free Trade by storming the Malakoff of Protection. But for the 20 years preceding, all enlightened persons had adopted the doctrines of Free Trade, and legislation had constantly proceeded in that direction. The Anti-Corn-Law League excited the intensest popular interest, and its doctrines were fully understood. It was merely to repeal an obnoxious statute, which all enlightened persons had become convinced was inherently unjust, and deeply injurious to the national prosperity. With all that, there is every probability that it would not have succeeded in overcoming the powerful interests arrayed against it for several years, if it had not been for the fortuitous occurrence of the potato failure in Ireland. But the Bimetallic League are advocating a scheme which very few people care about, and still fewer understand, but which the more it is examined by the light of historical facts and solid reasoning, the more visionary and impracticable it is seen to be. It has just received a crowning blow. The German agriculturists, deluded into the belief that Bimetallism would raise the price of corn, worried the Government into appointing a Commission on the subject, and the Commission has agreed that it is not possible

to raise the price of silver by International Agreement. So vanish the last flickering hopes of the Bimetallists. The Bimetallic League is foredoomed to failure, because it is in rebellion against the demonstrated Laws of Nature

The Anglo-Indian Government, as Governments usually do, have committed every species of error. By the process of exhaustion there is only one remaining course for them to adopt, and that is the right one. The blethering clishmaclavers of the Bimetallists have vanished into the absolute **Nothing**. To exclude Gold, which circulated in India by scores and scores of millions, altogether from the Monetary System was the most extraordinary act of barbarism and retrogression ever committed by any Government. They followed, it appears, the example of the commercial Dutch, but the Dutch repented of their error, and retraced their steps. The Indian Government must do the same. For 30 years the Indian Government has seen the necessity of restoring the Gold Standard, and made some abortive efforts to do so. If the right course had been adopted 30 years ago, the sovereign might have been made the Standard Unit at the rate of 10 rupees, as was universally demanded. But the Government coquetted with Bimetallism. If they had then closed the mints to the free coinage of silver, they might easily have established the sovereign at the rate of 10 rupees, and then India would have had a Currency on the model of that of Great Britain, which has since been followed by every European Government. But they sought to fix the sovereign at 10 rupees, *without closing the mints*, which their own experience for 100 years might have warned them was utterly impracticable. They still have adhered to their resolution to restore the Gold Standard: and they took the indispensable preliminary step of closing the mints in June, 1893. But we are now in June, 1894, and they have not given the faintest sign of completing their work. Why is this unaccountable delay? Is the Government asleep? Nero (the Government) is fiddling while Rome (India) is burning. Closing the mints would prevent a fall in the internal value of the rupee in India, but it could not possibly produce stability in the Exchanges, nor affect the price of the Council Bills, because they

must be purchased at the market price of silver. Accordingly, they have continued to fall since the closing of the mints. There can be no possible stability in the Exchanges, nor in the price of the Council Bills, until the Gold Standard is restored

Having taken the indispensable step of closing the mints, the Government may fix the ratio of the sovereign and the rupee at whatever figure they please. With the examples of the English and French subsidiary Silver Coinages before us, it would seem that they might even fix it at 10 rupees. But it certainly would not be expedient to do so. The ratio between Gold and Silver in England and France was fixed as near as possible at their market value at the time, and people got accustomed to it : and this ratio has been preserved by strictly limiting the issue of silver. But to go back to the old ratio for India would be much too violent a proceeding. The best course would seem to be to follow the British precedent as nearly as possible, and to fix the ratio just sufficiently above the current market price of silver to induce the people to bring out their hoards of gold to be coined, and to induce merchants to import Gold rather than Silver. Perhaps Customs duties might be made payable in Gold. At all events, the Government has it in its power to have its Treasuries bursting with Gold within a definite time. To prepare the necessary quantity of Gold Coin will necessarily be a work of some time, and already a whole year has been wasted in which so much might have been done. A year which has already added so much to the calamities of unhappy India. This extraordinary delay is nothing less than culpable. By these means only can a stable Monetary System be restored to India, in which people will feel confidence, and Capital will once more flow freely into the country to develop its resources

The unfortunate blunder made by the Anglo-Indian Government in their attempt to restore the Gold Standard and Currency in 1864, has fixed for ever upon unhappy India a burden of more than £8,000,000 a year, in the extra taxation necessary to meet her payments in London, besides the countless losses from the retardation of the development of her resources, from the disturbance of commerce, and the losses of private persons. Such have been the consequences to unhappy India of the ignorance of

the Laws of Economics in high places. She will for ever feel bitterly the truth of Horace's line—

“*Quicquid delirant Reges, plectuntur Achiivi*”

The past is of course irretrievable : but the Government has now the opportunity of fixing things in their present position, and so preventing matters getting worse, and henceforth letting her commence a course of renascent prosperity

Let the Bimetallists cease from their vain endeavours to upset our present system of Coinage, in which they can no more succeed than the ripple of the summer sea can wash away Ailsa Craig. Let them join heart and soul with those who are now urging the Government to restore the Gold Standard and Currency to India, modelled on such of the European systems as the wisest and most experienced expert may deem most suitable for the circumstances of India. For let them be assured that there is no possibility of bringing about a stability of Exchange between England and India until the two countries have a common standard Unit : and there will never be Monetary Peace for India until the **Gold Sovereign** is made the **Standard Unit** throughout the whole **British Empire**

## CHAPTER VIII

## On Commercial Credit

1. Having investigated the complete Juridical and Mathematical Theory of Credit: or the Creation: the Transfer or Circulation: and the Extinction: of the Goods, Chattels, Commodities or Merchandise, or Economic Quantities, termed Credits or Debts, we have now to exhibit its practical application in Commerce in Mercantile Credit: in Banking: and in the Foreign Exchanges. In this chapter we shall explain the mechanism of Commercial Credit: *i.e.*, where Credit is created to circulate existing commodities: or to produce them

*On Credit created to Transfer or Circulate existing  
Commodities*

2. Goods or commodities in the ordinary course of business pass through the following hands—

1. The grower, or foreign importer
2. The manufacturer
3. The wholesale dealer
4. The retail dealer
5. The customer or consumer

To the first four of these persons the goods are **Capital**: because they grow or import them: manufacture or deal in them for the sake of profit. The fifth buys or consumes them for the sake of use and enjoyment. The price the consumer or ultimate purchaser pays for them must evidently be sufficient to reimburse the original expenses of production

Now, leaving out of consideration for the present how the foreign importer of the goods obtained them, which concerns the foreign trade of the country, which we do not touch upon here—if he sells the goods for ready money to the manufacturer or the

wholesale dealer, he can, of course, import or produce a further supply of goods in the room of those he has disposed of

In a similar way the wholesale dealer sells to the retail dealer: and if the retail dealer pays him ready money, he might immediately effect further purchases from the merchant to supply the place of the goods he had sold

So if the retail dealer were always paid in ready money by the consumer, he might replace the part of his stock that was sold

And so if everybody had ready money at command, the stream of production, or circulation, might go on uninterruptedly as fast as Consumption or Demand might allow. Thus the Circulation or Production—of which we have shown that Circulation is one form—would be effected by money which would in this case be the Circulating Medium

But this is very far from being the case. Few or no persons have always ready money at command for all the purposes they require. Very few traders can commence with enough ready money to pay for all their purchases: and if the stream of production or Circulation were to stop until the Consumers had paid for the goods in money, it would be vastly diminished

Now, if the wholesale dealer sees that there is a certain demand for goods, if he has no money, and the merchant will not sell the goods to him except for ready money—there will be no Circulation, and no Profits

Now as Mill says—“Wealth is *anything* which has purchasing power”

Suppose that the merchant has confidence in the wholesale dealer's character and integrity, he sells the goods to the wholesale dealer on Credit: that is, he sells him the goods, and, instead of the actual money, he takes his promise to pay three months after date. That is, he sells the goods for a Credit, or Debt, or a Right of action, instead of for Money

Now this case is a Sale exactly as if the goods were sold for Money. The merchant cedes the Property in the goods to the dealer exactly the same in one case as in the other

Hence we see that Credit has caused exactly the same Circulation, or Production, as Money does. Hence Credit is Circulating Medium exactly as Money is

This Credit, Debt, or Right of action so created may be recorded in two ways—

1. As a simple Debt in the merchant's books
2. As a Bill of Exchange

But it is quite clear that the Property is exactly the same in whichever form it is : it has equally circulated commodities, and the claim as a Right of action is equally valid in one form as the other : though one form may have more conveniences than the other : and the Book Debt can at any time be transformed into a Bill of Exchange at the pleasure of the parties

In a similar manner the wholesale dealer may sell the goods on Credit to the retail dealer, and the Credit, Debt, or Right of action may be recorded either as a Book Debt or a Bill of Exchange. As in the former case, the same Circulation, or Production, has been effected by Credit as by Money

Lastly, the retail dealer may sell the goods on Credit to the Consumer or Customer, and this debt may also be recorded as a Book Debt or a Bill of Exchange. In this case, however, the Debt most usually rests as a simple Book Debt : it is very seldom in the form of a Bill of Exchange

Thus we see that Credit has exactly the same effect in circulating goods through every stage as Money : hence Credit is **Circulating Medium** exactly as Money is : and that all the Debts in the books of traders are part of the Circulating Medium of the country just as much as Bills of Exchange : which was the universal doctrine of statesmen until Lord Overstone perverted men's minds on the subject

Moreover, at each transfer it is necessary to create a new Credit, Debt, or Right of action : thereby exemplifying the distinction we have already pointed out between Credit and Bills of Lading : because if the goods had passed through so many transfers the same Bill of Lading would always have accompanied them

Now the Credit, Debt, or Right of action, for which the merchant sold the goods to the wholesale dealer is, no doubt, valuable Property to him, because he knows that it will be paid in due course. Similarly the Debts for which the other parties sold their goods are also valuable Property to them. Credit, even so



far as this, would greatly conduce to Production, or Circulation : and the vast amount of it generated in this way would be valuable Property to its owners. But in this state it would be of no further use to them. It might, therefore, be aptly compared to so much dead stock : the next step is to convert it into so much living stock

### *Credits or Debts made Saleable*

3. It appears from Sir Francis Child,<sup>1</sup> that before the institution of Banks in this country Commercial Bills were not transferable : it was supposed that it was contrary to the Common Law

He says that it was the custom in Holland that every person who bought goods on Credit should give his Note for the payment, which the seller of the goods might put into circulation like so much Money : and make use of in further purchases. He was very anxious that this practice should be introduced into England : but he says that the Common Law did not allow it : in which however he was mistaken both in law and fact : as it was perfectly legal : and transferable bills and notes had been in common use centuries before

The next step therefore was to make this dead stock negotiable, or exchangeable : *i.e.*, to make the Debts themselves Saleable Commodities : to sell them in exchange for other goods like Money : or to sell them for ready Money : or for others immediately convertible into ready Money on demand : and therefore equivalent to Money

The history of Bills of Exchange in this country is very obscure, and not easy to be understood. It is not easy to understand how it came to pass that while bills and notes payable to order or to bearer were in common use at the time of Henry VII., and had probably been so for centuries before, it should be thought by so eminent an authority as Sir Francis Child that they were not transferable at law. Nevertheless, the ancient custom came into use again, and in process of time traders found that they could use the Bills they had taken in exchange for their

<sup>1</sup> *A Discourse on Trade*

goods to purchase other goods with : and those persons who sold their goods for the Bills used them to purchase other goods with. Thus it was found that Bills of Exchange could circulate in commerce, and effect exchanges in exactly the same way as Money, until they were paid off and extinguished : being indorsed at every transfer for the sake of securing their payment. Thus Bills of Exchange became a great Circulating Power, or Medium. At one time the Circulating Medium of Lancashire consisted almost entirely of Bank of England Notes, and Bills of Exchange which had sometimes 150 indorsements on them before they became due.

But there are two classes of traders whose especial business it is to buy these Commercial Debts, either for Money or for Credit immediately convertible into Money : and therefore equivalent to Money

The first class of these traders are called Bill Discounters, *i.e.*, buyers of Debts : they buy these Debts with actual money

The second class are called **Bankers** : they buy Commercial Debts by creating other Debts payable on demand

The buying of Commercial Debts seems to have begun when the Goldsmiths became bankers, as will be described hereafter. Having large sums placed with them for which they agreed to pay heavy interest, and which were repayable on demand, they perceived that the most profitable way of trading was to discount Bills with their own Credit ; they did not buy the Bills with actual Money as Money lenders and Bill discounters do : when they bought a Bill they simply gave their customers a Credit for it in their books less the discount : and the Bills maturing at short intervals quickly brought money back to them to enable them to meet claims upon them

Thus all traders who received Bills in exchange for goods found a market where they could immediately convert their Bills payable at a future time into ready Money

The mechanism of Banking will be exhibited in the next chapter

#### *Upon Accommodation Bills*

4. The Bills we have been considering arise out of past transactions. The merchant having sold his goods to the trader

for a Right of action, he may sell this Debt to his banker. If the banker discounts the bill he has two names as securities : first the acceptor of the bill, or the buyer of the goods, who is the Debtor primarily responsible : or the principal debtor as he is called ; and secondly his own customer, who indorses the bill to him, and so becomes security that if the principal debtor does not pay the bill, he will

But banking Credits may be created to effect future transactions, as well as to buy debts created by past transactions

Suppose that a merchant wishes to effect a purchase, he may request his banker to discount his Promissory Note so as to obtain a Credit to effect his purchase. But the banker may say to him that it is against his rules to discount any instrument containing only one name : but that if he can get any responsible friend to stand security for him by indorsing his Note, that he will discount it for him. Suppose then his friend joins with him, without having received any consideration, in making the Note : such an instrument would be an **Accommodation Note**

And when any person puts his name on a bill to stand security for its payment, without having received any consideration for so doing : it is termed an **Accommodation Bill**

The banker, now having two names on the instrument, discounts it : and the merchant, having now a Credit on his account, purchases goods, the proceeds from the sale of which are intended to meet the bill when it becomes due

Now it is evident that the security of this bill, which is an **Accommodation Bill**, is exactly the same as if it had been a real bill

What difference can it make whether a bill which arose out of a *past* transaction is sold for a banking credit, and the goods are sold to meet the bill : or a bill is sold for a banking credit, and goods are purchased with it to meet the bill ? The practical effect is that B stands security to the bank for the advance made to A : and what is there in the nature of such a transaction, anything worse than for one man to stand security for another in any commercial transaction ?

A great deal has been said and written about the difference between Real and Accommodation Bills : and while no<sup>o</sup> terms of

admiration are too strong for the first: no terms of vituperation are too strong for the latter. Thus Mr. Bell says—"The difference between a genuine commercial bill and an accommodation bill is something similar to the difference between a genuine coin and a counterfeit one": as if the fact of negotiating an Accommodation Bill were in itself one of moral turpitude

It is generally assumed that real bills possess some sort of security because it is supposed that there is Property to represent them. We have already pointed out the error of this idea. Real and Accommodation Bills have exactly the same security—they are simply claims against the persons of the obligants, which they are liable to make good out of their whole estates. The objection, therefore, to Accommodation Bills on that ground is futile

The essential distinction between Real and Accommodation Bills is that one represents *past* transactions and the other *future* transactions. In a Real Bill goods *have been* purchased to meet the Bill: in an Accommodation Bill the goods *are to be* purchased to meet the Bill. But this is no ground of preference of one over the other. A transaction which has been done may be just as wild, foolish, and absurd as one which is to be done. The intention of engaging in any mercantile transaction is that the result should repay the outlay with a profit. There is no other test but this of its propriety in a mercantile sense

The common objections against Accommodation Paper are, therefore, futile and quite wide of the mark. And the proof of it is that the largest, safest, and most profitable part of Scotch banking is entirely of the nature of Accommodation Paper

The system of Accommodation Paper is one of immense importance to modern commerce: and the abuses of one kind of it have contributed to produce the greatest calamities: but as in this part of the work we confine ourselves to exhibit the advantages and effects of solid credit, we shall reserve what we have to say about the abuses of Accommodation Paper till we treat of the abuses of Credit

### Exaggerated Ideas of the Security of Real Bills

5. The above are the fewest number of hands that goods pass through in the ordinary course of business: and it is clear

that in their passage from the importer or grower to the consumer they will give rise to three bills. These are all regular business bills : they originate from real transactions : and for that reason they are what are called **Real or Value Bills**. They arise out of the regular and ordinary course of business, and they are the great staple of what bankers purchase. It is a very prevalent opinion, even among men of business, that Real Bills are essentially safe, because they arise out of real transactions, and represent property. But the foregoing considerations will dispel much of the security supposed to reside in Real Bills on that account : because we have seen that in the most legitimate course of business there will generally be two or three Bills afloat arising out of the transfers of any given goods : so that in the ordinary course of business there will be twice or thrice as many Bills afloat as there is Property to which they refer. Moreover such ideas arise from the inveterate errors of lay writers, literary and mathematical, who treat of the subject, because they almost invariably suppose that the Bills are a title to the goods for which they are given : whereas, as we have explained, Bills are not a title to any money or goods whatsoever : they are nothing but an abstract right against the persons of the obligants

The above operations are only what arise in the ordinary course of business ; sometimes, however, goods may change hands much more frequently, and at every transfer a new Bill will be created. In times of speculation transfers are often much more numerous : and all the Bills created on these transfers are technically Real Bills : but it is evidently a delusion to suppose that there is any security in them on that account. The whole error arises from misconceiving the meaning of the word "*represent*." A Bill of Lading does represent goods : because whoever holds the bill has the property in those specific goods

But a Bill of Exchange does not "*represent*" any goods at all. It represents nothing but a Debt : it does not even "*represent*" Money : it is nothing but a Right of action against a person to pay money. It is created as a substitute for Money to transfer goods : but it does not "*represent*" goods any more than Money "*represents*" goods. Nor does it represent Money any more than Money represents goods : it is merely exchangeable for

Money. "Credit is to Money" says Daniel Webster "what Money is to goods"

This was long ago pointed out by Thornton<sup>1</sup>—"In order to justify the supposition that a Real Bill, as it is called, represents actual property, there ought to be some power in the bill holder to prevent the property which the bill represents from being turned to other purposes than that of paying the bill in question. No such power exists: neither the man who holds the bill, nor the man who discounts it, has any property in the specific goods for which it is given"

This is perfectly manifest: the goods which the bill was created to transfer will probably be scattered in fifty different directions before the bill becomes due: and passed through the hands of fifty different proprietors: and of the several bills which were created on the repeated transfers of the goods, which "represents" the goods? The real security of every bill simply consists in the general ability of the parties to it to meet their engagements: and not in any specific goods or money it is supposed to represent

### *On the Distinction between Bills of Exchange and Bills of Lading*

6. The distinction between Bills of Exchange which are Credits or Debts, or mere abstract Rights of action, and are Valuable Securities, and Bills of Lading, which are Documents of Title, is of so subtle a nature, but of such momentous consequence, that it may be as well to illustrate it further

It has been shown that any amount of goods may, by repeated transfers, give rise to any number of Bills of Exchange: because a new Bill is created on each transfer, which are all *bona fide*: just for the same reason that every transfer of goods requires an amount of Money equal to itself to transfer it

Even supposing that the price remained the same, it would require twenty times £20 to circulate goods to the value of £20 twenty times. So Bills of Exchange may represent the transfers of many times the value expressed on their face. This is the

<sup>1</sup> *Essay on the Paper Credit of Great Britain*

case when the Bill is indorsed away for value: and the Bill represents as many additional values expressed on the face of it as there are indorsements. Thus when the Lancashire Bills had 150 indorsements on them, it showed that they had circulated 150 times their face value of goods

Thus, suppose a real transaction between A and B: A draws upon B: that represents one transaction, or transfer of goods

A then buys from C: C might draw upon A, in a similar manner as A drew upon B. But instead of this A may pay for the goods he bought from C, by giving in payment for them the Bill he drew upon B. The Bill has now effected two transfers: and the indorsement is equivalent to a new drawing

In a similar way C may buy goods from D: and pay for them by indorsing over the Bill he has received from A. The Bill then has *two* indorsements and represents *three* transfers of goods: the new indorsement being equivalent to a new drawing

In a similar way the Bill may pass through any number of hands, and effect any number of exchanges. When C indorsed the Bill over to D, he merely sold to him the Debt which A had previously sold to him. Now that may be done either by drawing a fresh Bill on B, cancelling the first: or by simply indorsing over the Bill he received from A. Hence, every indorsement is always equivalent to a new drawing. But if he draws a fresh Bill on B, it will represent nothing but B's Debt to him: whereas, if he indorses over the Bill he received from A, it will represent B's Debt to A: A's Debt to C: and C's Debt to D: and consequently it will be much more desirable for D to receive a Bill which represents the sum of so many previous transactions, and for the payment of which so many parties are bound to the whole extent of their estates

This also shows that no true estimate of the effect of Bills in circulation can be formed from the returns to the Stamp Office, as has sometimes been attempted to be done: as every indorsement is in effect a new Bill. So that the useful effect of a Bill is indicated by the number of indorsements upon it. Just in the same way no conclusions as to the useful effects of Money can be drawn from the actual amount of it in a country: the useful effect of Money consists in its actual amount multiplied into the velocity of its circulation

But indorsements on a Bill of Lading have a totally different meaning. A Bill of Lading is bound down to the goods it represents, and always accompanies them, however many the transfers may be

Hence *ten* indorsements on a Bill of Exchange denote that *eleven* times the amount of goods have been transferred *once*

Ten indorsements on a Bill of Lading denote that the *same* goods have been transferred *ten* times

### *On Credit Created for the purpose of Forming New Products*

7. The operations we have just considered were for the purpose of transferring commodities which had already been purchased : or which were to be purchased : but which in either case were already in existence. And some persons suppose that the whole purpose and limit of Credit is to transfer commodities which are already in existence

But as Credit is an article of exchangeable property, or merchandise of exactly the same nature, though of an inferior order to Money, it may be applied exactly like money to bring new products into existence. The limit of Credit in this case being exactly the same as in the former case—namely the power of the proceeds of the work to redeem the Credit

As an example of the employment of Credit to create new products we may cite the following instance<sup>1</sup>—"The States of Guernsey having determined to build a meat market, voted £4,000 to defray the cost. Instead of borrowing this sum at 5 per cent. interest, the governor issued 4,000 cardboard tickets on which was inscribed "Guernsey Meat Market Notes": they represented £1 each, and were legal currency by universal consent. With these Notes they paid the contractor : and with them he paid his workmen, and all who supplied them with materials. They were freely taken by the tradesmen for goods : by landlords for rent : by the authorities for taxes. In due season the market was completed. The butchers' stalls, with some public rooms over them, were let for an annual rent of £400. At the expiration of the first year of this tenancy, the

<sup>1</sup> *Minton's Capital and Wages*, p. 235



States called in the first batch of Notes, numbered 1 to 400 : and with the £400 of real money received for rent, redeemed the £400 of representative money expressed by the 'Meat Market Notes.' At the end of ten years all the Notes were redeemed through the application of the ten years' rental. In this way they built a very good market house, without paying any interest on borrowed money, and without injuring anybody

"I am informed that one of the first docks constructed on the banks of the Mersey in Liverpool was made in the same manner. Labor Notes were issued which circulated all through the town, as money does, and they were redeemed out of the dock dues of the first few years"

Mr. Frederic Hill testifies that this was no isolated instance, but that it was the usual method adopted in effecting public works!—

"I may mention the abundance of Paper Money in Guernsey as a great cause of prosperity. The Paper Money is issued by the Government of the island, and in the following way. When any great undertaking has been determined on by the States (as the representatives of the people are called), such for instance as the opening of new roads, there is immediately an issue of £1 Notes. These Notes are sent out as the work proceeds, and as money is wanted. When the undertaking is completed, and begins to yield an income, the Notes are brought in again and new undertakings are commenced. The Notes are not payable on demand : indeed the Government has not even an office at which they can be presented. Nevertheless the Notes are never refused. The people find by experience that their representatives do not issue the Notes in greater abundance than the demand for them justifies, and consequently, no depreciation in their value is to be feared. Moreover, the purposes for which the notes are issued are of advantage to every man in the island, so that every one looks upon them as coming from a bank in which he is a partner. Here, then, in the little island of Guernsey, we have, perhaps, the only instance in the world of a really national bank : a bank in which the whole property of the state is the security, and the profit of which is shared by the people at large. By means of

<sup>1</sup> *Autobiography*, p. 65

this healthy Currency, undertakings of great magnitude (considering the size of the island), have been executed during the last few years "

Credit, being Purchasing Power, may be used to purchase Labor as well as Commodities: and that Labor may be employed in forming or creating new products as well as in circulating commodities already in existence. Thus already we see the absurdity of Mill's dictum that Credit is purchasing but not *productive* power

In the next chapter we shall show that Companies have been formed on the Continent for the express purpose of promoting improvements in agriculture on this principle, and have been the main causes of the prosperity of these countries

But where institutions are very solid and enjoy high credit, they may also issue Notes payable on demand, for the express purpose of promoting such operations. The immense improvements in agriculture and public works in Scotland have been effected by the Banks issuing £1 Notes: and their £1 Notes payable in gold on demand are as readily received in Scotland as Money itself: and produce exactly the same effect as Money itself. They have done on a gigantic and permanent scale exactly what was done by the Guernsey Meat Market and other Notes

Credit is in all cases whatever the **Present Value of the Future Profit**: and if it is profitable to advance Money to effect any operation, to be replaced with a profit by the result, it is of course equally profitable to create an equal amount of credit, which will be redeemed with a profit by the result of the operation

## CHAPTER IX

## THE THEORY OF BANKING

*Origin of Banking in Europe*

1. The Romans invented the business which in modern language is termed **Banking**

At an early period Rome began to gain an ascendancy over the neighboring towns. Numerous strangers flocked to her, bringing the coins of their native towns with them. For their convenience the Government built shops round the Forum, and let them out to private persons for the purpose of exchanging the money of strangers for Roman money. These persons were called *Argentarii*: and their shops were called *Tabernæ*, *Mensæ*, or *Argentariæ*. The commission they charged was called *Collybus*, from *κόλλυβος*, the rate of exchange for changing the money of one country for that of another; changing money was also called *Permutatio*

The business of these persons was, at first, pure money changing, but upon that they subsequently engrafted others •

It became the custom of private persons to deposit their money with them for the mere purpose of security. In this case the *Argentarius* acquired no property in the money: but he held it subject to the directions of the depositors. Such a sum of money deposited with the *Argentarius* for the mere purpose of custody and safe keeping, and without any property in it being acquired by him, was in Roman Law termed a **Depositum**. The *Argentarius* was the mere **Bailee** or **Trustee** of the money and not its proprietor. This *Depositum* was in no sense a *Mutuum*, or a Loan

The *Argentarius*, not being allowed to trade with the money, paid no interest for it: it was called *vacua pecunia* °

But in process of time the *Argentarii* not only received money as Bailees or Trustees to be kept *in specie* as a *Depositum*, but they received it as a Loan, or *Mutuum*. It thus became their own property, with which they were allowed to trade, and for which they paid interest. The money was not returnable to their customers *in specie* but *in genere*. Such money was also termed a *Creditum*. The persons who placed their money with their *Argentarius* as a *Creditum* lost all property in it: and acquired only a Right of action, in modern language a Credit, or Debt, in exchange for it. The earliest notice we have of the banks or *Argentarie* is in Livy, ix., 40 (B.C. 308), where they are spoken of as being already placed in the Forum where they always remained. But he gives no account of the method in which the *Argentarii* transacted their business.

When their customers wished to transfer their Money or their Credit to other persons it may be taken for granted that their customers called upon them and gave them oral directions.

This method of doing business, however, was very troublesome: and with the Roman instinct for practical business the *Argentarii* adopted a much simpler plan. They authorised their customers to give a written order to the persons to whom they wished the Money or the Credit to be transferred. This written order was termed *Attributio*, or *Perscriptio*—in modern language a *Cheque*. *Scribere* was to give Credit in the books: *rescribere*, or *perscribere*, was to give a *Cheque* to transfer a Credit or payment of Money to another person. The entry of the person's name in the *Codex* or *Tabulæ*, either for money paid or received, was termed *Nomen*: hence *Nomen* became a common word for a Debt, or an Obligation: afterwards *Creditum*, or *Debitum*.

The use of *Cheques* had become common before the time of Plautus (B.C. 224-181), in whose comedies there are many allusions to bankers and their business. He calls them *Trapezite*, *Argentarii*, and *Danistæ*.

Thus Leonida says<sup>1</sup>—

“Abducit domum ultro, et scribit numos”

“Of his own accord he brings him home and places the money to his Credit”

<sup>1</sup> Plautus, *Asinaria* II., 4, 34

*Acceptum ferre* was to credit a customer's account with money received : *expensum ferre* to debit it with money paid "

Thus Plautus says<sup>1</sup>—

" *Ratio accepti et expensi inter nos convenit* "

" *The accounts between us balance* "

So Terence says<sup>2</sup>—

" *Sed transi, sodes, ad forum atque illud mihi argentum rursum jube rescribi, Phormio* "

" *Phorm: Quodne ego prescripsi porro aliis quibus debui* "

" *Bul, Phormio, be good enough to go over to the forum and order that money to be placed to my Credit* "

" *Phorm. : What ! that for which I have already given Cheques to my creditors?* "

So Cicero says<sup>3</sup>—

" *Qui de c c c c, His c c presentia solverimus, reliqua rescribamus* "

" *As for the four hundred sestertia, I have paid two hundred in cash, and I shall send a Cheque for the rest* "

The Roman bankers also invented Bills of Exchange. As the Romans extended their conquests over distant countries they established correspondents in them for the purpose of remitting for the use of the armies

Bills of Exchange are mentioned in numerous places in Cicero's letters of which we may cite a few instances—

Thus he says<sup>4</sup>—

" *Se ait curasse ut cum quaestu populi pecunia permutaretur* "

" *He says that he has taken care that a Bill for the money should be sent (to Rome) along with the people's share of the profit* "

So when his son is going to Athens he writes<sup>5</sup>—

" *Sed quaero quod opus illi erit Athenis, permutarine possit, an ipsi ferendum sit* "

" *But I wish to know whether the money he will want at Athens can be sent by a Bill, or whether he must take it with him* "

*Mostellaria*. I., 3, 116    <sup>2</sup> *Phormio*, V., 7, 29    <sup>3</sup> *Epist. ad Atticum*, XVI.

<sup>4</sup> *Epist. ad famil: to Caninius Salustius*

<sup>5</sup> *To Atticus*, XI., 24

So again<sup>1</sup>—

“Quare velim cures ut permutaretur Athenis quod sit in annum sumptum”

“Wherefore I wish you would take care to send him a Bill at Athens for his yearly expenses”

So also<sup>2</sup>—

“Ut vereor ne illud quod tecum permutavi, versurā mihi solvendum est”

“So that I fear I must borrow money to pay the Bill you cashed for me”

But these Cheques and Bills were not transferable or payable to anyone else than the payee, because at that time Roman Law did not permit of the transfer of Debts without the consent of the Debtor: and the Romans had not made the great modern invention of transferring Obligations by indorsement

### *On the meaning of the word Bank*

2. Before however we proceed to explain the mechanism and effects of Banking, we must first ascertain the meaning of the word **Bank**: because great misconception prevails respecting it

If we take up the most common works on Banking,<sup>3</sup> we find it stated that—

1. That the word Bank comes from the Italian word *Banco*, which means a Bench: because it is alleged that the Italian money dealers, or money changers, kept their money on a bench: whence they were said to have been called *Banchieri*

2. That the business of a Banker consists in dealing in Money: or in acting as an intermediate agent between persons who want to lend money and those who want to borrow money

3. That the Profits of a banker consist in the difference between the interest he pays for the money he borrows and the interest he charges for the money he lends

All these notions, however, proceeding from apparently high authority, are entirely erroneous

<sup>1</sup> *Ibid.*, XX., 15

<sup>2</sup> *Ibid.*, V., 15

<sup>3</sup> e.g., *Gilbart on Banking*

The Italian money changers, as such, were never called *Banchieri* in the middle ages : nor are persons whose sole business is money changing ever called Bankers in any language. So long as they confined their business to money changing and lending money they were called *Cambiatores*, *Cambitores*, *Campsores*, *Speciarii*, *Argentarii*, *Nummularii*, *Trapezite*, *Daniste*, *Collybiste*, and *Mutuatores* : and their places of business were called *Casane* : and not *Banchi*

At one time there was considerable discussion in Italy as to the origin of the word *Banco*. Many writers said it came from *abacus*, a calculating machine. But Muratori entirely disproves of such a derivation<sup>1</sup>—"To me on the contrary, the word seems to have come from the German word **Banck**, which is a very ancient word in that language," and he says that the word was first used for a store of goods in the town of Brescia

Ducange also says<sup>2</sup>—"Bank is of Franco-German, or Saxon origin : no other is to be sought for "

There is no doubt whatever these learned authors are right

The word Banck in German has two meanings—

(1) A heap or mound, like a sandbank : hence a store, like the goods in a shop

(2) A bench or seat : because the surface of a sandbank was usually smooth and level

Many writers who are not acquainted with the technicalities of business suppose that the word Bank as a place of business comes from the second of these meanings : because they suppose that the *banco* was the counter upon which the money changers kept their money

But the technical meaning of the word *Banking* : and the invariable use of the term by the Italian Economists : and the universal meaning attributed to the word when it was first introduced into English, conclusively prove that the preceding opinion is erroneous : and that as a technical term in commerce it is derived from the first of the meanings given above, *i.e.*, a mound or heap

<sup>1</sup> *Antiq. Ital. Med. Ær.*, Vol. II., p. 1,148

<sup>2</sup> *Med. et Infim. Lat. Lex.*, s. v. Bancus

The word Bank originated in this way—

The Roman State made it a cardinal maxim of their policy not to carry on more than one war at a time. In 1171 the City of Venice was at war both with the Empires of the East and the West. Its finances were in a state of great disorder: and the Great Council levied a forced loan of one per cent. on all the property of the citizens, and promised them interest at the rate of five per cent. Commissioners were appointed to manage the loan, who were called *Camera degli Imprestiti*. Such a loan has several names in Italian, such as *Compera*, *Mutuo*, &c.: but the most usual name is **Monte**, a joint-stock fund. This first loan was called the *Monte Vecchio*, the old loan: subsequently two other similar loans were contracted, and called the *Monte Nuovo* and the *Monte Nuovissimo*. In exchange for the Money, which became the absolute property of the Government, to be employed for public purposes, the citizens received **Stock Certificates**, or **Credits**, which they might transfer to anyone else: and the Commissioners kept an office for the transfer of the stock and the payment of the dividends

At this time the Germans were masters of a great part of Italy, and the German word **Banck**, meaning a heap, or mound, came to be used synonymously with **Monte**: and was Italianised into **Banco**: and the public loans were called indifferently **Monti** or **Banchi**

It was this office, the Chamber of Loans, which such multitudes of writers have supposed was the famous Bank of Venice. But this is a complete mistake. It was in no sense a Bank in the modern sense of the word: it was simply the National Debt Office: it was similar to the National Debt Office of the Bank of England: it was the origin of the Funding System

Thus in the *Volpone* of Ben Jonson, the scene of which is laid in Venice, Volpone says—

“I turn no monies in the public **Bank**”—

Meaning, “I do not dabble in the Venetian Funds”

So an English writer, Benbrigge, in 1646, speaks of the “three **Bankes**” at Venice: meaning the three public loans, or **Monti**



So in Florian and Torriani's Italian Dictionary, published in 1659, it says—"Monte, a standing Bank, or Mount, of money, as they have in divers cities in Italy"

That the word *Banco* in Italian means a Public Debt might be proved by numberless quotations

Thus a recent writer, Cibrario, says<sup>1</sup>—"Regarding the Theory of Credit, which I have said was invented by the Italian cities, it is known that the first Bank, or Public Debt (*il primo Banco o Debito Pubblico*), was erected in Venice in 1171. In the thirteenth century paper money is mentioned at Milan: the Credit was paid off. A Monte, or Public Debt (*un Monte o Debito Pubblico*), was founded in Florence in 1336"

This passage shows that **Banco** = **Monte** = a Public Debt

At Genoa, during the wars of the fourteenth century, the Bank of St. George was formed of the Creditors of the State

Every Economist in the south of Europe knows that the word **Bank** means a Public Debt

Thus the distinguished Spanish Economist Olozaga, speaking of the Venetian Loans, says<sup>2</sup>—"El Monte Vecchio (*Banco Viejo*) . . . el Monte Nuevo (*Banco Nuevo*)"

So in Baret's Italian Dictionary, 1839, it says—"Monte, a Bank where they lend or take money at interest"

So Evelyn speaks<sup>3</sup> of the *Monte di Pietà* at Padua, where there is a continual Bank of Money to assist the poor

So Blackstone says<sup>4</sup>—"At Florence, in 1344, Government owed £60,000, and being unable to pay it, formed the principal into an aggregate sum called metaphorically a *Mount*, or *Bank*."

Every one acquainted with the writings of the Italian Economists knows perfectly well that they invariably use the words **Monti** and **Banchi** as absolutely synonymous: and in the reports published by the Statistical Office the words are also sometimes used as synonymous<sup>5</sup>

This was also the meaning of the word **Bank** when it was first introduced into English

<sup>1</sup> *Economia Politica del medio evo*

<sup>2</sup> *Tratado de Economia Politica*, vol. I., p. 101

<sup>3</sup> *Diary*, vol. I., p. 101

<sup>4</sup> Vol. I., p. 322, *Kerr's edit.*

<sup>5</sup> I am informed by my friend Professor Lorini, of Siena, that the word *Monte* is not used now in Italian for a bank

Thus Bacon says<sup>1</sup>—"Let it be no **Bank**, or common stock"

So Gerard Malynes says<sup>2</sup>—"Mons Pietatis, or Bank of Charity. In Italy "there are *Montes Pietatis*; that is to say, *Mounts* or *Banks* of Charity"

Benbrigge in his *Usura Accommodata*, 1646, says—"For their rescue may be collected *Mons Pietatis sive Charitatis*, or *Banke* of Piety or Charitatis, as they of Trent fitly call it"

Again—"For borrowers in trade for their supply as their occasion shall require may be erected *Mons Negotiationis* or *Banke* of Trade"

Tolet says—"Mons fidei, a Banke of Trust which Clement XII. instituted at Rome—he that put his money into this Banke was never to take it out again"; for which the lender received 7 per cent. interest, like the subscribers to the original Bank of England stock. He also speaks of *Mons Recuperationis*, or Banke of Recovery, in which the interest was 12 per cent.

The difference between these two, which were Public Debts, was that the first was a perpetual annuity, and the second a terminable annuity, in which the higher rate of payment was repayment of the principal

In the time of Cromwell several proposals were made for erecting public Banks. Samuel Lambe, a London merchant in 1658, recommending them says—"A Bank is a certain number of sufficient men of estates and Credit joint together in Joint Stock: being as it were the general cash keepers or treasurers of that place, where they are settled, letting out Imaginary Money (*i.e.*, **Credit**) at interest at  $2\frac{1}{2}$  or 3 per cent. to tradesmen, or others that agree with them for the same, and making payment thereof by assignation, and passing each man's account from one to another with much facility and ease"

So Francis Cradocke, a London merchant, who was appointed a member of the Board of Trade by Charles II., strongly advocated the introduction of Banks into England, and says—"A Banke is a certain number of sufficient men of Credit joined together in a stock, as it were, for keeping several men's cash in one Treasury, and letting out Imaginary Money (*i.e.*, **Credit**) at

<sup>1</sup> *Essay on Usury*

<sup>2</sup> *Lex Mercatoria*, Part II., ch. 13

interest for three or more in the hundred per annum, to tradesmen or others that agree with them for the same: and making payment thereof by assignation, passing each man's account from one to another, yet paying little money." And he says that "the aforesaid bankers may furnish another petty Bank (or Mount) of Charity"

Thus these writers perfectly well understood the nature and constitution of a Bank. They knew well that the function of a Bank is to advance Imaginary Money—or Credit—and not metallic Money, as is the popular delusion of the present day

In a little tract, entitled "*A Discourse concerning Banks*," and supposed to be by a Director of the Bank of England, it says—"There are three kinds of Banks: the first for the mere deposit of Money [like those of Venice, Amsterdam, Hamburg, &c.]: the second for profit." "The Banks of the second kind, called in Italy *Monti* [*i.e.*, Public Debts] which are for the benefit of the income only, are the Banks of Rome, Bologna, and Milan. These Banks were made up of a number of persons who, in time of war, or other exigencies of state, advanced sums of money upon funds granted *in perpetuum*, but redeemable. . . . The third kind of Banks, which are both for the convenience of the public and the advantage of the undertakers, are the several Banks of Naples, the Bank of St. George at Genoa, and one of the Banks of Bologna. These Banks having advanced sums of money at their establishment, did not only agree for a fund of perpetual interest, but were allowed the privilege of keeping cash"

The Bank of England was of this last kind. It was a company of persons who advanced a sum of money to the Government, and received in exchange for it a perpetual annuity: or a right to receive for ever a series of annual payments from the State. This annuity is in legal phrase termed a Bank Annuity: in popular language the Funds

There has only been one instance in this country of a Bank which did not receive cash from the public. Some time after the foundation of the Bank of England a company of persons united to advance a million to the Government. They were incorporated as the "Million Bank." This company existed till nearly

the end of the last century, and thus it resembled the original Bank of Venice

Thus from these passages, and many more might be cited if necessary, it is perfectly clear that the word **Bank**, as a term in commerce, is the equivalent of **Monte**: and meant a joint stock fund contributed by a number of persons

So when the word Bank was introduced into our American colonies before the Revolutionary War, Professor Sumner says<sup>1</sup>—“Bank as the word was used before the Revolutionary War meant only a batch of paper money, issued either by the Government, or a Corporation. The impression seems to have remained popular that the essential idea of a “Bank” is the issuing of Notes . . . . The notes issued in “Banks” or masses as loans were pure paper money”

So in a valuable history of the Notes issued in the United States,<sup>2</sup> it says that an issue of Paper Money to the amount of £50,000, authorised to be issued by the Treasury, was styled a Bank

The essential feature of all these “Banks” was this: the subscribers advanced the money as a Loan or *Mutuum*: it thus becomes the actual property of the borrowers: and in exchange for their **Money** the lenders received a **Credit**, *i.e.*, a certificate or promise to pay interest, which they might transfer to any one else.

And those persons whose business it was to trade like these Banks, *i.e.*, to buy money and in exchange for it to issue **Credit** of various sorts, were termed **Bankers**, and only those

Thus as a technical term in business, to “**Bank**” means to issue **Credit**

### *On the meaning of the word Banker*

**3.** Equally great misconception prevails as to the meaning of the word Banker: and the nature of the business of Banking.

Gilbart says<sup>3</sup>—“A banker is a dealer in Capital: or more properly, a dealer in **Money**. He is an intermediate party

<sup>1</sup> *History of American Currency*, p. 6, n

<sup>2</sup> *United States Notes*. By John Gay Knox, late Comptroller of the Currency. London, 1885

<sup>3</sup> *Principles of Banking*, p. 1

between the borrower and the lender. He borrows of one party and lends to another : and the difference between the terms at which he borrows, and those at which he lends, forms the source of his profit ”

So a report of the House of Commons says<sup>1</sup>—“The use of **Money**, and that only, they regard as the province of a Bank, whether of a private person or incorporation, or the Banking department of the Bank of England ”

Notwithstanding the apparently high authority of these passages which have misled so many unwary persons : these descriptions of the nature of the business of Banking are entirely erroneous

In former times there were many persons who acted as intermediaries between persons who wanted to lend and those who wanted to borrow. They were called Money Scriveners. The father of John Milton was a Money Scrivener. But no one ever called a Money Scrivener a **Banker**

At the present day many firms of Solicitors act as intermediaries between persons who wish to lend and others who want to borrow. They may have some clients who wish to lend, and other clients who want to borrow : and they act as agents between them. The first set of clients may entrust their money to the firm to lend to the second set : and the solicitors receive a commission on the sums which pass through their hands

But no one ever called a firm of solicitors who transact such business “**Bankers**” : which shows that there is an essential distinction between the business of Money Scriveners and such a firm of Solicitors, and the business of “**Bankers**”

Solicitors who transact such agency business do not acquire any **Property** in the money which passes through their hands. They receive it merely as a **Bailment** or a **Depositum**. They are only the custodians or the Trustees of the money : and it is only entrusted to their custody for the express purpose of being applied in a certain way. The actual property in the money passes directly from the lender to the borrower through the

<sup>1</sup> *Report on Commercial Distress, 1858*

medium of the Trustees or Bailees : and if the latter appropriated the money in any way to their own purposes it would be a felony, and they would be liable to be punished for embezzlement

But the case of a **Banker** is wholly different. When his customers pay in money to their account they cede the Property in the money to the Banker. The money placed with him is not a **Depositum** or a **Bailment** : it is a **Mutuum**, or a *Creditum*, it is a “loan” or sale of the money directly to himself. The banker is not the Trustee or Bailee of the money : but its actual **Proprietor**. He may trade with it, or employ it in any way he pleases for his own profit or advantage. The Banker buys the money from his customer : and in exchange for it he gives his customer a **Credit** in his books : which is simply a Right of action to demand back an equivalent amount of money from his banker at any time he pleases : and the customer may transfer this Right of action to any one else he pleases : just like so much money

When the client of a solicitor entrusts money to him to lend to some one else, he retains the Property in it until the arrangement with the borrower is completed : and then the Property in the money is transferred directly from the lender to the borrower : without in any way vesting in the solicitor. But when a customer pays in money to his banker the Property in it instantly and, *ipso facto*, vests in the banker : and the customer has nothing but a Right of action against the **Person** of the banker to demand back an equivalent sum. So long as the money remains the possession of the customer it is a *Jus in rem* : but when he has paid it into his account he has nothing but a *Jus in personam*

Galiani says<sup>1</sup>—“ Banks began when men saw from experience that there was not sufficient money in specie for great commerce and great enterprises

“ The first Banks were in the hands of private persons with whom persons deposited money : and from whom they received **Bills of Credit** (*fedi di Credito*) : and who were governed by the same rules as the public Banks now are. And thus the Italians

<sup>1</sup> *Della Moneta*, p. 323

have been not only the fathers and the masters, and the arbiters of commerce: so that in all Europe they have been the depositories of money: and are called Bankers”

So Genovesi says<sup>1</sup>—“These **Monti** were first administered with scrupulous fidelity, as were all human institutions made in the heat of virtue. From which it came to pass that many placed their money on deposit: and, as a security, received **Paper** which was called, and is still called, **Bills of Credit**

“Thus private Banks (*Banchi*) were established among us, whose Bills of Credit acquired a great circulation, and *increased* the quantity of signs, and the velocity of commerce”

And this was always recognised as the essential feature of “**Banking**”

Thus Marquardus says<sup>2</sup>—“And by “**Banking**” is meant a certain species of trading in money, under the sanction of public authority, in which money is placed with bankers (who are also cashiers and depositories of money) for the security of Creditors and the convenience of Debtors, in such a way that *the Property in the money passes to them*: but always with the condition understood that any one who places his money with them may have it back whenever he pleases”

A “**Banker**” is therefore a person who trades in the same way that the Public Banks did: they acquired the Property in the money paid in: and in exchange for it they gave **Bills of Credit**: which circulated in commerce exactly like money: and produced all the effects of Money. And moreover when they bought, or discounted, Bills of Exchange, they did it exactly in the same way: they bought them by issuing their own **Credit**: and **Not** with Money. And experience showed that they might multiply their Bills of Credit several times exceeding the quantity of money they held: and thus for all practical purposes multiply the quantity of Money in circulation

Thus the essential business of a “**Banker**” is to create and issue **Credit** to circulate as Money

In the neighborhood of the Royal Exchange many firms announce themselves as “**Money Changers and Foreign Bankers.**”

<sup>1</sup> *Delle Lezioni di Economica Civile*, part ii., ch. 5, § 5

<sup>2</sup> *De Jure Mercatorum*, Lib. ii., ch. 12, § 13

Thus they show that they know that Money Changing is not "Banking." By Foreign Bankers they mean that in exchange for Money they will give their customers Bills of Credit on their foreign correspondents

The following is the true definition of a "Banker"—

*"A Banker is a Trader who buys Money and Credits, Debts, or Rights of action payable at a future time by creating and issuing Credits, Debts, or Rights of action payable on demand."*

As will be more fully exemplified in subsequent sections

### *On the Currency Principle*

4. We must now explain the meaning of an expression which has acquired much importance, and which must be clearly understood before we come to the exposition of the system which the Bank Charter Act of 1844 was designed to carry out

The express function of a Bank being to create Credit, it has sometimes been maintained that a Bank should only be allowed to create exactly as much Credit as the specie paid in and no more. And that its sole function should be to exchange Credit for Money, and Money for Credit : and thus the quantity of Credit in circulation would always be exactly equal to the Money it displaced

This doctrine is that which is distinctively known by the name of the "Currency Principle." It is the doctrine which the supporters of the Bank Act of 1844 asserted to be the only true one : and which that Bank Act was specially designed to carry out

This doctrine is supposed to be of modern origin, and the latest refinement in the Theory of Banking. But this is far from being the case : it was first formulated in China in 1309

That country had been plagued for 500 years with the excessive issues of inconvertible paper by the banks. The author of a work named *T'soa-min*, exhibiting the evil consequences of excessive issues of Paper Money, and speaking of the times before such mischief arose, said—"Then it was ordered that at the offices of the rich merchants who managed the enterprise, when the Notes were paid in the Money came out : when the Bills



came out the Money went in: the Money was the mother, the Note was the son. The son and the mother were reciprocally exchanged for the other”

Several Banks have been constructed on this principle: such as those of Venice, Amsterdam, Hamburg, Nuremberg, and others.

These places, small in themselves, were the centres of a great foreign commerce: and as a necessary consequence large quantities of foreign coin of all sorts, of different countries and denominations were brought by the foreigners who resorted to them. These coins were, moreover, greatly clipped, worn, and diminished. The degraded state of the current coin produced intolerable inconvenience, disorder, and confusion among merchants, who, when they paid or received payment of their bills had to offer or receive a bagful of all sorts of different coins. The settlement of these bills, therefore, involved perpetual disputes—which coins were to be received and which were not; and how much each was to count for

In order to remedy this intolerable inconvenience, it became necessary to institute some fixed and uniform standard of payment so as to insure regularity of payments, and a just discharge of debts

To effect this purpose the magistrates of these cities instituted a Bank of Deposit, into which every merchant paid his coin of all sorts and countries. They were weighed, and the Bank gave him credit in its books for the exact bullion value of the coins paid in. The owner of the credit was entitled to have it paid in full weighted coin on demand

These Credits, therefore, insured a uniform standard of payment, and were called Bank Money—*Moneta di Banco*: and it was enacted that all bills upon these cities above a certain small amount should be paid in Bank Money only

As this Bank Money was always exchangeable for coin of full weight on demand, it was also at a premium, or *agio*, as compared with the worn, clipped and degraded coin in circulation. The difference was usually from 5 to 9 per cent. in the different cities. The term *agio* is misleading: because it is evident that it was the *Moneta di Banco* which was the full legal standard: and the current coin was at a discount

These Banks professed to keep all the coin and bullion deposited with them in their vaults. They made no use of it in the way of business, as by discounting bills. Thus the Credit created was exactly equal to the specie deposited: and their sole function was to exchange Credit for Money and Money for Credit.

These Banks were examples of the **Currency Principle**. They were of no use to commerce further than to serve as a safe place to keep the money of the merchants, and to insure a uniform standard for the payment of Debts. They made no profits by their business: and no Bank constructed on the Currency Principle can by any possibility make profits. The merchants who kept their accounts with the Bank paid certain fees to defray the expenses of the establishment.

These Banks were Banks of Deposit: because the Money and Bullion placed with them were merely placed there for safe custody and keeping. But they were not Banks in the true sense of the word, because the money deposited with them did not become their absolute property to deal with as they pleased. They were simply **Trustees** of the money. They were, however, Banks in a certain sense: because the primary meaning of *Banco* is a store: and they were stores of money. They were not the Bankers, but the Treasurers of the merchants: and they were obliged to take a solemn oath that they would keep in their vaults all the money deposited with them. Nevertheless, both at Venice and Amstefdham, they violated their solemn oaths, and advanced large sums to the Government, which ultimately led to their ruin.

### *The Bank of Venice*

5. One of these Banks of Deposit has acquired so much celebrity that we may say a few words about it.

More than thirty years ago we pointed out<sup>1</sup> that the popular legend that the Bank of Venice, founded in 1171, was a Bank in the modern sense of the word was a pure myth, and that it was in reality nothing but a Public Debt: and that the word *Banco* in Italian is equivalent to *Monte*, and means a Public Debt. We

<sup>1</sup> *Dictionary of Political Economy*, Art. 574, *Banking at Venice*

also gave such an account of it as was available from information which was accessible at the time

Some ten years after that Professor Elia Lattes<sup>1</sup> and Professor F. Ferrara<sup>2</sup> threw a flood of light on the question, and on early banking at Venice, by publishing a series of documents from the Archives of the Venetian Senate, of which Professor Charles F. Dunbar, of Harvard University, has given a most interesting account in the *Quarterly Journal of Economics* for April, 1892, from which we extract the following details—

Banking at Venice, like all banking in Italy, originated with the *campesores* in the 11th or 12th century. As early as 1270 it was deemed necessary to require them to give security to the Government. It is not shown that up to this time they received *mutua* from private persons. But soon after that date they began to do so : and in an Act of September, 1318, it was provided that "*Bancherii scriptæ*:" should give security. It was therefore recognised that at this period they received *mutua* from private persons. The *bancus* or *bancherius scriptæ* meant that payments were made by transferring Credits from one account to another as modern bankers do. This transfer of Credits was also called *giro* : as we have shown, it was a Novation

These *mutua* became the absolute property of the bankers, which is the true essence of banking : and provided that they kept sufficient cash in reserve to meet usual demands, they were allowed to trade with the rest for their own profit in any way they pleased. Accordingly they employed their spare cash in mercantile adventures. They were in fact merchant bankers : the most pernicious form of trading : and this was no doubt the reason why so few of them escaped failure. In 1374 it was attempted to prohibit it, but the Acts had little effect, and were modified

They also invested their spare funds in Government securities.

But as far as we can ascertain, they did not invent the plan of discounting Mercantile Bills by creating Credits in their books, termed Deposits, by which modern bankers are enabled to create an amount of Circulating Credit more than ten times the amount

<sup>1</sup> *La Libertà delle Banche a Venezia dal secolo xiii. al xvii.*, Milano, 1869

<sup>2</sup> *Archivio Veneto*, 1871. *Nuova Antologia*, Jan. & Feb., 1871

of cash they keep in reserve, thereby in fact augmenting the Capital of the country. As far as we are at present informed, this was invented by the goldsmith-bankers of London during the Civil War, as we shall show hereafter

The pernicious habit of bankers, who are liable to pay large sums of money on demand, investing their spare funds in merchandise, the returns from which are always doubtful and uncertain, prevailed for centuries at Venice, and involved them in constant difficulties. During the 14th, 15th, and 16th centuries numerous Acts were passed to compel bankers to pay their creditors cash on demand: and they were forbidden to trade in merchandise: but such were wholly ineffectual. In 1526 it was enacted that a Credit in bank should be accepted as payment, unless an express contract was made to the contrary. It was also ordered that all transfers of Credit should be made in presence of both parties: which shows that the Venetians at that time did not use Cheques as the Romans did. These Credits were payable in good and heavy gold, under a penalty of 25 ducats in case of refusal

At last, in 1384, the failure of the house of Pisani and Tiepolo for 500,000 ducats convinced the Senate that the whole system of private, or merchant, banking must be put a stop to

Tommaso Contarini made a speech in the Senate pointing out its inseparable evils. He said that out of 103 banking firms in Venice 96 had failed, and only 7 were solvent. In 1584 the Senate passed an Act to establish a Public Bank and to suppress private bankers. But in the following April this Act was repealed, in consequence of the opposition to it: and the Republic was left for three years without any bank, private or public, to the great injury and confusion of its business

At last in 1587 an Act was passed to establish a Public Bank: it was called the Banco di Rialto, or sometimes the Banco della Piazza

This was a pure Bank of Deposit under the management of the State. It was a *Banco di scritta*. It was ordered to receive all deposits in good money, which it was to repay on demand: Credits could only be transferred from one account to another in the presence of both parties: or by the written order of the

Creditor to the Bank. This was a Draft, and not a Cheque, because the money placed there did not belong to the Bank, but was only in its custody for safe keeping

In 1593 a further Act provided that all Bills of Exchange should be paid by transfers of Credit only : *i.e.*, by Novation

The Governor of the Bank was forbidden under heavy penalties to traffic in, use, or lend any of the money deposited

By an Act of 1619, the Senate, for certain reasons detailed, founded a second Bank called the *Banco del Giro*, on similar principles, and it was this Bank which became the famous Bank of Venice

The *Banco di Riutto* continued till 1637, when it was absorbed by the *Banco del Giro*. The Act founding it is given by Professor Dunbar

All the public creditors were inscribed as creditors in the books of the *Banco del Giro*. This placed it in difficulties from the very beginning. The Government paid into it a certain amount of cash to meet its liabilities, and promised to make further payments from the revenue. This, however, was not found very easy to do : and fresh liabilities had to be created to meet the demands upon it. Moreover, it was shamelessly plundered by its officials : and it had to be reorganised in 1663. The Government also, during the war of Candia, laid their hands upon its funds : and it suspended payments in cash from 1717 to 1739. In 1797 further tamperings with its funds had taken place : so that with liabilities of 1,500,000 ducats it had only 522,000 of assets. By the treaty of Campo Formio, in 1797, Venice was handed over to Austria. The Austrians made some feeble attempts to restore the credit of the Bank, but they could not resist the temptation of plundering it : so that in 1804 the deficit had increased to 1,230,000 ducats. After Austerlitz Venice again fell into the power of France, and the Bank, being found to be hopelessly insolvent, Napoleon, in July, 1806, issued a decree for its liquidation

### *On the Mechanism of Banking*

6. Banks of the nature of those of Venice, Amsterdam,

Hamburg, and others founded on the Currency Principle never existed in this country. And we must now explain the mechanism of the great system of Banking—or the great system of the commerce in Credits, Debts, or Rights of action, as it has been carried on in this country

It was during the great civil war, as we have explained elsewhere, that the Goldsmiths of London first began to receive the cash of the merchants and country gentlemen for safe custody, on condition of repaying an equal sum on demand : and to discount Bills of Exchange with their own promissory Notes : that is, commenced the business of Banking

Now this money was not placed in their hands to be locked away in their cellars, as plate and jewelry are often given into the custody of a banker for mere safe custody as a *Depositum* : and to be restored *in specie*. The Money was sold to the banker to become his actual property, according to the well understood custom of bankers : that is, it was a **Mutuum** or a **Creditum** : and to be restored only *in genere*. The goldsmith-bankers agreed not only to repay the money on demand, but also to pay six per cent. interest upon it. Consequently, in order to make a profit, they were obliged to trade with it

We must now explain how a banker makes a profit by the money his customers sell to him

• Suppose that customers pay in £10,000 to their accounts : they cede the absolute property in the money to the banker : it is a *Mutuum* or *Creditum*. The banker buys the Money from his customers : and in exchange for it he gives them an equal amount of Credit in his books : that is, he creates Rights of action against himself to an equal amount : giving his customers the right to demand back an equal amount of money at any time they please : and also the right to transfer their Rights of action to any one else they please : exactly as if they were money : and the banker agrees to pay the Transferee the same as his own customer

This Right of action, Credit, or Debt, entered in the banker's books, is in banking language, technically termed a **Deposit**

After such an operation his accounts would stand thus—

LIABILITIES		ASSETS	
Deposits - - -	£10,000	Cash - - - -	£10,000

Now though his customers have Rights of action against the banker to demand exactly an equal sum of money to what they have paid in : yet persons would not pay money to their banker if they meant to draw it out immediately : just as no one would spend all the money he has at once

Nevertheless, some will want to draw out part of their funds : but if some customers want to draw out money, others will, probably, pay in about an equal sum. Observation shows that in ordinary and quiet times a banker's balance will seldom differ by more than one thirty-sixth part from day to day.

The banker's cash is, therefore, like a column of gold with a slight ripple on the surface : and if he retains one-tenth in cash to meet any demands which may be made upon him, that is ample and abundant in all ordinary times

If then, in the above example, the banker retains £1,000 in cash to meet any demands upon him : he has £9,000 to trade with and make a profit by : and it is just in the method in which bankers trade that so much misconception exists

It is commonly supposed that when a banker has the £9,000 to trade with, he employs it in purchasing Bills of Exchange to that amount : and that he receives a profit only on the £9,000 : but that is a complete misconception of the nature of **Banking**

A "**Banker**" *never buys Bills of Exchange with Money* : that is the business of a bill discounter : or a money lender

The way in which a "**Banker**" trades is this : he sees that £1,000 in cash is sufficient to support £10,000 of liabilities in Credit : consequently he argues that £10,000 in cash will bear liabilities to several times that amount in Credit

One of the most eligible methods of trading for a banker is to buy, or discount, good commercial bills. And he buys these Bills exactly in the same way as he bought the Cash : that is by creating Credits in his books : or Debts : or Rights of action against himself to the amount of the Bills—deducting at the

same time the Interest or Profit agreed upon : which is called the Discount

A “Banker,” therefore, invariably buys a Bill of Exchange with his own **Credit** : and never with cash—exactly in the same way that he bought the cash. That is, he buys a Right of action payable at a future time by issuing a Right of action payable on demand : and this Right of action, or Credit, is also in banking language termed a **Deposit** : as the Right of action created and issued to buy the cash

Suppose that the banker buys £40,000 of Bills of Exchange at three months : and that the agreed upon profit is 4 per cent. : then the sum to be retained on these Bills is £400. Consequently in exchange for bills to the amount of £40,000 he would create Credits, Debts, Rights of action—technically termed **Deposits**—to the amount of £39,600

Hence just after discounting these Bills, and before his customers began to operate upon them, his accounts would stand thus—

LIABILITIES.		ASSETS.	
Deposits - - - -	£49,600	Cash - - - -	£10,000
		Bills of Exchange -	40,000
	<hr/>		<hr/>
	£49,600		£50,000
		Balance of Profit -	400

The balance of £400 being his own Property or Profit

By this process the “Banker” has added £39,600 in Credit to the previously existing cash : and his Profit is clear : he has not gained 4 per cent. on the £9,000 in cash : but 4 per cent. on the £40,000 of Bills he has bought

This is what the business of Banking essentially consists in : and thus the correctness of the definition of a “Banker” given above is manifest

It is also evident that a Banker’s profits depend upon the quantity of Credit he can maintain in circulation in excess of the cash he holds in reserve



Thus we see that the very essence and nature of a **Bank** and a **Banker** is to create and issue Credit payable on demand: and this Credit is intended to Circulate and perform all the functions of Money

A Bank is, therefore, not an office for "borrowing" and "lending" Money: but it is a **Manufactory of Credit**: as Mr. Cazenove well said, it is the Banking Credits which are the Loanable Capital: and as Bishop Berkeley said, "a **Bank** is a **Gold Mine**"

So we ought not to speak of the Money Market but the **Credit Market**

### *On the Legal Relation between Banker and Customer*

7. It must be carefully observed that the **Legal Relation** between Banker and Customer is simply that of **Debtor** and **Creditor**

When a customer pays in money to his account with his banker, he cedes the absolute property in the money to the banker and receives in exchange for it a **Right of action**, or **Credit**, or **Debt**, to demand an equivalent sum of money at any time he pleases, but not the identical money

In speaking of banking it is too often implied that the money placed with the banker still belongs to the customer. But this was decisively refuted by Lord Chancellor Cottenham<sup>1</sup>

It must, therefore, be carefully observed that a Banker in no way resembles the Treasurer of a public fund: or a solicitor: or a money scrivener: who are only Trustees or Bailees of the money placed with them by their clients. If a banker were the mere Trustee of the money placed with him, he would have no right to use it for his own private profit

It is often the custom of persons to say that they have so much money at their banker's: but such an expression is wholly erroneous and misleading: they have no "Money" at their bankers: they have nothing but an abstract **Right of action** to demand so much money from their banker: which they give in exchange to their banker for money

<sup>1</sup> *Foley v. Hill*, 2 H. L. cases, 28

As a consequence of this relation between Banker and Customer, if a customer were to leave a balance at his bankers for six years without operating on it, or receiving interest for it, the banker might, if he chose to be so dishonest, refuse to pay it under the Statute of Limitations : just like any other ordinary debt. But if he were a mere Trustee he could not refuse to pay it : because the Statute of Limitations does not apply to Trusts.

Another consequence of this relation is that a Cheque is a Bill of Exchange, and not a Draft. It is an Order addressed by a Creditor to his Debtor : and not one addressed to his Trustee or Bailee. To call a Cheque a Draft is to mistake the relation between Banker and Customer.

### *On the Legal Contract between Banker and Customer*

**8.** It has been shown that the Legal Relation between Banker and Customer is simply that of Debtor and Creditor.

Nevertheless, there is an important distinction between an ordinary Debtor and a Banker Debtor.

At Common Law an ordinary Debtor is not bound to accept a Bill drawn upon him by his Creditor without his own consent : even though he admits the Debt : nor if the Creditor assigns the Debt is he bound to pay the Transferee. The Debtor has simply engaged to pay his Creditor and no one else. Nor has the Transferee any right of action against him, because there is no privity of contract between the Debtor and the Transferee : and the Creditor has no power to stipulate that the Debtor shall pay the Transferee : unless he expressly consents to do so.

The Transferee can only sue the Debtor under the name of the Transferor : or the Transferor can sue the Debtor as the Trustee of the Transferee.

If, however, the Debtor had entered into an Obligation under seal promising to pay the assignee or bearer : or if he had accepted a Bill payable to order, or to bearer : then the Transferee might sue him in his own name : because the consent of the Debtor had created a privity of contract between himself and the Transferee.

But the case of a Banker Debtor has always been different.

When persons have money in their own possession they can transfer it to any one else at any moment they please. Persons therefore would not place their money with bankers unless they had exactly the same facility of transferring their Right of action against their Banker as they had of transferring the Money itself

Consequently, from the very first institution of Banking, it was always the fundamental contract that the customers might either demand payment themselves from their bankers: or *that they might transfer their Rights of action made payable to order or to bearer or to any one else* as freely as their money: and the bankers agreed to pay the transferee as readily as their own customers

By the very nature, therefore, of the Consensual Contract termed the Custom of Bankers, a banker having funds of his customer is in the position of an ordinary Debtor who has accepted a bill payable to order or to bearer

Hence, while the simple admission of funds by an ordinary Debtor in no way compels him to accept or to pay a bill drawn upon him without his own consent, the simple admission of the possession of funds by a banker operates, *ipso facto*, as a legal acceptance of any Bills or Cheques drawn upon him by his customer: and gives the holder of them a Right of action against him

It was long an opinion of the Bar that the holder of a Cheque had no action against the banker, even though he possessed funds of his customer, because he had not accepted the Cheque

But in the work I did for the Law Digest Commission, I established that the true doctrine of the Common Law is that when a person either orally or in writing, whether under seal or not, issues a Right of action transferable to order or to bearer, he is liable to an action by the Transferee. And this doctrine received the unanimous assent of the Commissioners: and was afterwards unanimously affirmed by the Court of Exchequer Chamber in the great case of *Goodwin v. Roberts*

When, therefore, it was held at the bar and in the text-books of Mercantile Law that the holder of a cheque had no action against a banker, the radical difference between an ordinary

Debtor and a Banker Debtor was overlooked. By the fundamental contract between banker and customer, the banker has given his consent that the customer may transfer his Right of action to any one he pleases : and this is further evidenced by the very form of the Cheques delivered to him, which are expressly made payable to order, or to bearer. Consequently, if the holder of the Cheque can prove that the banker has funds of his customer, he has an action against him

Martin, B., said<sup>1</sup>—"A banker is in the position of a person having in his hands the money of another (?) which he is at any moment liable to pay : and the Courts have grasped at that to make a contract between the banker, his customer and a third party, for the payment of the money to the latter operates as a transfer of the money, so that an action for money had and received can be maintained for it"

The fact is it is not the Courts which have made the contract : they only enforce the fundamental contract which has already been made between the banker and his customer : which the decision in *Goodwin v. Roberts* has declared to be a perfectly legal one

It must therefore be understood that a Banker's Note and a Cheque drawn on him by a customer who has funds at his Credit, are in all respects identical instruments

This point, however, has less importance now, because by the Supreme Court of Judicature Act, the rules of equity are now established as Law : and the holder of a Cheque could always sue a banker in Equity, if he could prove that the banker held sufficient funds of his customer to meet the Cheque : which completely settles and determines any doubt that there might previously have been on the subject

### *On the meaning of Deposit in the Technical Language of Modern Banking*

9. The word *Depositum* is one of that class of Latin words of which we have seen several instances already, which in classical Latin meant a material thing, but which in modern times has come to mean only an Abstract Right

<sup>1</sup> *Liversidge v. Broadbent*, (4 H. & N. Q. 2)

A *Depositum* in Roman Law means anything which is placed in the gratuitous charge or custody of some person for the sole purpose of safe keeping : without the property in it passing to him : or his being allowed to use it in any way for his own advantage : or even being allowed to retain it as a security for a debt due to him

It is part of the duty of a London banker to take charge of his customer's plate, jewelry, and securities, if required to do so. This plate, jewelry, and securities so committed to their charge for safe custody is what in Roman Law is called a *Depositum*

The banker acquires no property in such a *Depositum* : he can make no use of it for his own advantage : he receives no remuneration for keeping it : and he has no lien on it if his customer becomes indebted to him

So if a customer tied up a sum of money in a bag and placed it in the custody of his banker it would be a *Depositum* : and the banker would be bound to redeliver the specific bag of money to him on demand, untouched. It is said that in the present crisis in America, numbers of customers withdrew their balances from their current accounts, tied them up in bags and redelivered them to their bankers to keep for them as *Deposita* : and then of course the bankers could not touch them<sup>1</sup>

It is almost universally supposed by lay writers that when a customer pays in money to his account with his banker, it is a **Deposit** : and that the "Deposits" of a bank are the cash held in reserve. This, however, is a pure delusion

When a customer in the ordinary ways pays in money to his account with a banker, he loses all property in it : the banker acquires the absolute property in it to use for his own advantage : such money, therefore, is not a *Depositum* : it is a *Mutuum*, or a *Creditum*

If the money so paid in were a *Depositum*, it would mean that the banker acquired no property in it : that the property in it remained with the customer who placed it in his banker's hands for pure safekeeping : and that he could demand back that specific sum of money at any time he pleased. But every person who thinks knows that such ideas are erroneous

<sup>1</sup> It has been stated that during the crisis of 1893, £80,000,000 in gold were withdrawn from the bankers as *Credita*, and replaced with them as *Deposita*

In exchange for the money the banker makes an entry of an equal sum in Credit in favour of his customer: that is, he issues a Right of action to him. And it is this entry of a Credit or Right of action in his customer's favor which in the technical language of modern banking is termed a **Deposit**: that is, he buys the money by creating a Deposit.

So when a banker discounts a Bill for a customer he buys a Right of action from him exactly in the same way as he bought the money. He creates a Credit in his books in his favour: or he issues a Right of action to him. This Credit, or Right of action, is the Price the banker pays for the Bill. And this Credit or Right of action created to purchase the Bill is termed a **Deposit**, equally as the Right of action created to purchase the money. The Money and the Bills are the banker's Assets. The Deposits are the Rights of action he has created to purchase his Assets. Every advance a banker makes is done by creating a Deposit. His Depositors are those persons who have Rights of action against him to pay money, or his Creditors. A **Deposit** is simply a **Banking Credit**.

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*In Banking Language a Deposit and an Issue are the same*

10. It must therefore be observed that in the technical language of modern banking a **Deposit** and an **Issue** are the same thing. A Deposit is simply a Credit in a banker's books. It is the evidence of the Right of action which a customer has to demand a sum of money from the banker. As soon as the banker has created a Credit, or Deposit, in his books in favor of a customer he has **Issued** to him a Right of action against himself.

The word **Issue** comes from **Exitus**, a going forth: and in Mercantile Law to issue an Instrument is to deliver it to any one so as to give him a Right of action against the deliverer or issuer.

It in no way increases the banker's liability to write down this Credit, or Deposit, on paper in the form of a Bank Note or Cheque. Such documents are only made after the Credit, or Deposit, has been created: and their sole purpose is to facilitate the transfer of the Credit or Deposit to some one else.

Now as every advance a banker makes is by issuing a Right of action against himself to his customer : and as a banker has an unlimited Right of buying any amount of Debts or Obligations from his customers which he thinks prudent, every banker has the Right of **Unlimited Issue**

Bank Notes and Cheques, then, do not increase a banker's liability. The liability is created as soon as the banker has entered the amount to his customer's Credit in his books. The Note, or Cheque, is merely a convenient method of transferring from hand to hand the pre-created liability which has already been issued

Deposits, then, instead of being so much Cash, as is so commonly supposed, are nothing but the Credits, or Rights of action, the banker has created as the Price to purchase the Cash and Bills, which figure on the other side of the account as his Assets. A sudden increase of Deposits is, therefore, nothing more than an inflation of Credit, exactly similar to a sudden increase of Bank Notes. Deposits are nothing but Bank Notes in disguise

As this error regarding the meaning of the word Deposit is almost universal among writers and speakers on Banking, we may cite one conspicuous example of it

Mr. John Torr, a Liverpool merchant, was questioned by Mr. Wilson before the Committee of the House of Commons on the Monetary Panic in 1858

Q. 4939.—“ I believe I am correct in the fact that all the transactions of the Banks in New York are published periodically, and at very short intervals, by the banking department?—I believe they are published weekly ”

Q. 4940.—“ These accounts as they are published, show the circulation of notes, the amount of specie held by the banks, the amount of advances made by the banks, and all the items in great detail, do they not?—They do ”

Q. 4941.—“ Are you aware that, during the last two or three years, while the circulation of notes had not increased at all, or had increased to the very smallest possible amount, the amount

of advances, as shown by these amounts, had, as you have referred to, increased to a very enormous amount?—Yes: I must apologise for the answer I gave: I meant the advances when I said the Notes: I meant the **liability** of the bank from its advances made on securities”

Q. 4942.—*Chairman (Mr. Cardwell).*—“*The mere act of making an advance does not render a person liable: of course the liability is the other way?*—Yes”

Q. 4943.—“Will you trace the process by which the banks increased their own liabilities by making advances to others?—Looking at the securities which they held from other parties, by making advances to a number of merchants to a larger amount than usual, they felt that the indebtedness of these parties to them was more than prudent”

Q. 4944.—*Mr. Wilson.*—“Do you think that the banks had made undue and imprudent advances in the loan of their **Capital and Deposits**?—I apprehend that they thought so . . .”

Q. 4947.—“But it would be either from **Deposits** or **Capital** that increased advances could be made by the banks?—‘Certainly”

Q. 4948.—Therefore, if you are aware that increased advances were made to a large extent, it must have been either from an increase of subscribed **Capital**, or from an increase of **Deposits**?—Yes: I apprehend so”

Mr. Cardwell and Mr. Wilson were considered to be among the ablest financiers of their day, and yet neither of them had the least knowledge of the true nature and effects of banking. Mr. Torr had a perception of the real nature of it: for he says that the banks had *increased* their liabilities by their advances. But he held his knowledge so loosely, that he was easily shaken out of his ideas, and gave in to Mr. Cardwell and Mr. Wilson. Neither of these gentlemen had the least idea of the true nature of banking: because banks make all their advances by creating and increasing their liabilities. This, however, seemed a paradox to Mr. Cardwell, who sneeringly asked the witness to explain how banks increased their own liabilities by making advances to others. Mr. Wilson asked him if the banks made imprudent advances out of their **Capital and Deposits**. Now banks have no **Deposits** in the



juridical meaning of the term: what they have are *Mutua*: but they make all advances by *creating* Deposits, *i.e.*, Credits in their books: and thus all banks make advances by increasing their Liabilities which was so sore a puzzle to Mr. Cardwell

This misconception of the meaning of the word Deposit leads to a somewhat amusing error which is usually seen in the newspapers every half-year, after the Joint-Stock Banks publish their accounts. Many papers give summaries of the accounts of the Banks, which show that they have about £800,000,000 of Deposits: and these innocent writers evidently consider that these are Deposits of cash: and hold up their hands in astonishment at the vast quantity of Cash the Banks hold. Now as no one supposes that there are more than £90,000,000 in gold coin in the country, it would somewhat puzzle these ingenious gentlemen to explain how there can be £800,000,000 of cash in the Banks. But any one conversant with banking would tell them that these £800,000,000 are not Deposits of Cash, but they are merely creations of Credit, and are nothing more than Bank Notes in disguise

### *On the Method of Utilising Banking Credits*

11. The banker, then, having issued these Credits, Deposits, or Rights of action against himself, to his customers, they cannot, of course, transfer them by manual delivery in that form to any one else. In order to be capable of manual delivery they must be recorded on paper or some other material

And this might be done in two forms—

1. The banker might give his customer his own Promissory Notes, promising to pay a certain sum to his customer, or to his order, or to bearer on demand

2. The customer might write a Note to his banker directing him to pay a certain sum to a certain person, or to his order, or to bearer on demand. These orders were formerly called Cash Notes: but they are now termed **Cheques**

These paper documents do not create new liabilities: they merely record on paper the Credits, Debts, or Deposits which have

already been created in the banker's books: and their sole use is to facilitate the transfer of these Rights of action to other persons

There is one juridical distinction between Bank Notes and Cheques. A Bank Note is the absolute obligation of the banker to pay it: a Cheque is only the contingent obligation of the banker to pay it, provided that the customer has sufficient credit on his account to pay it. If, however, he has, then the obligation of the banker is absolute. The holder of a Cheque with funds to meet it on the drawer's account has the same Right of action against the banker, as upon one of his own Notes. So far as regards Economics, Bank Notes and Cheques are absolutely identical. They are both equally **Circulating Medium, or Currency**

Bankers' Notes were at first merely written on paper like any other promissory notes, and they were for any sums the customer might require. In 1729 Child and Co. introduced the practice of having their Notes partly printed and partly written like a modern Cheque. They were not like modern bankers' notes for fixed definite sums: but, like modern cheques for any sum that might be required

London bankers appear to have issued their own notes till about 1793: when perhaps the panic of that year may have shown them the danger of having large amounts of their notes in the hands of the public: which their enemies might collect and present for payment. In 1793 they discontinued issuing notes of their own accord: but they were never forbidden to do so until the Bank Act of 1844

Most erroneous conclusions have been drawn from the fact of the London bankers having voluntarily discontinued issuing their own notes. Lay writers, who know nothing of the mechanism of banking, have asserted that the London banks are like the Banks of Venice, Amsterdam, &c., pure banks of Deposit: that they do not create Credit: and that their whole business is to "lend" out the money they "borrow" from their customers. All such ideas are, however, pure delusions. Bankers now, as ever, make all their advances by creating Credits, or Deposits, in their books. But instead of giving their customers *two* methods of circulating

these Credits by means of Notes or Cheques, they are now restricted to *one* method—Cheques. But whether a Bank Credit is circulated by means of a Note or a Cheque makes no possible difference in Economics

Nevertheless, the discontinuance of issuing Notes by the London bankers has had one immensely important practical consequence which nobody ever foresaw. After it was shown by an experience of thirty years that banking could be carried on in London without issuing notes, same lynx-eyed Economists began to scrutinize the privileges of the Bank of England: and they maintained that its monopoly was restricted to the power of issuing notes: and that Joint Stock Banks might be founded which, like the private banks, did not issue notes: which would be no violation of the privileges of the Bank. This view was found to be correct: and the result was the formation of the London Joint Stock Banks: as will be more fully described hereafter

The Bank Charter Act of 1844 allowed the Banks which were then issuing notes to continue to do so to a certain limited amount: but forbade any new bank to commence doing so. A considerable number of the banks which issued notes in 1844 have disappeared, and the notes of private banks have diminished by several millions. Many ill-informed writers have drawn the conclusion from this circumstance that the currency of the country has been diminished by so much. This, however, is a pure delusion. The system of banking has enormously increased since then, and the amount of Banking Credits has increased by scores of millions: and these increased Banking Credits being circulated by Cheques are **Currency** in exactly the same way as Notes

#### *Operations by means of Notes and Cheques*

When, therefore, a banker has created a Credit, or Deposit, in favor of his customer, he can put this Credit into circulation either by means of the banker's own Note, or by means of a Cheque: and when he does so, the following different results may take place—

1. The customer himself, or the holder of the Note or Cheque, may demand payment of it : if they do so, the banker's liability is extinguished. It is a resale of money to the holder of the Note or Cheque : and the banker buys up the Right of action against himself

2. The Note or Cheque may circulate in commerce, and effect any number of transfers of commodities or payments exactly like an equal sum of money : and it may ultimately fall into the hands of a customer of the same bank, who pays it into his own account, and the whole series of transactions is finally closed by the mere transfer of Credit from the account of the drawer to that of the holder, without the necessity of any coin

3. The Note or Cheque may, after performing a similar series of operations, fall into the hands of a customer of another bank. So the banker becomes debtor to the customer of another bank

But if the bank A becomes debtor to the customers of bank B, the chances are that about an equal number of the customers of bank A will have about equal claims against bank B. If the mutual claims of the customers of each bank are exactly equal, the respective documents are interchanged, and the Credits are re-adjusted among the accounts of the different customers without any payment in money. Thus, if the mutual claims among any number of bankers exactly balanced, any amount of Credits, however large, might be settled without the use of a single coin

Formerly, if the mutual claims did not balance, the differences only used to be paid in Money or Bank Notes. But now, by an ingenious arrangement of the Clearing House, which will be described shortly, the use of Coin and Bank Notes is entirely dispensed with : and all the banks which join in the clearing are really and practically formed into one huge banking institution for the purpose of transferring Credits among each other : just as Credits are usually transferred from one account to another in the same bank : without a single coin being required

### *Error of the Common Description of Banking*

12. From the preceding account of the actual mechanism of Banking, it will be seen what a complete misconception of its

nature it is to say that bankers are merely agents or intermediaries between persons who wish to lend and those who wish to borrow

This is entirely untrue in the ordinary sense of "lending" and "borrowing:" because in the ordinary sense of "lending" the "lender" deprives himself of the use of the thing "lent"

But when a person pays in money to his banker, he has no intention of depriving himself of the use of it. On the contrary, he means to have the same free command of it as if he had it in his own house. The customer, therefore, "lends" his money to his banker, but at the same time has the free use of it. The banker employs that money in promoting trade. Upon the strength of having acquired it he buys Debts with his promises to pay several times exceeding the amount of money he possesses: and the persons who sell him their Debts have the free use of the very same coin which the "lenders" have the very same right to demand. Thus the "lenders" and the "borrowers" have the same rights to demand the same coin at the same time. And all banking depends on the calculation that only a certain portion of each set of customers will demand the actual cash: but that the majority will be satisfied with the mere promise to pay, or the Credit

The whole of this mystery and confusion is cleared away by simply observing that a Bank is merely a shop for the sale of **Credit**: and the quantity of Credit which a Bank can create is determined by the ratio of the Demand for payment in money compared to the total quantity of Credit created

Banking entirely depends on the doctrine of chances: it is a species of insurance: it is practically possible that a banker may be called upon to pay all his liabilities on demand at once: just as it is theoretically possible that all the lives insured in an office may drop at the same instant: and it is theoretically possible that all the houses insured in an office may be burned down at the same instant

A large and sudden demand for money on a Bank is termed a **Run**: and a Run upon a Bank is analogous to a pestilence or a conflagration to an Insurance Office. But all Insurance and Banking is based upon the expectation that these contingencies

will not happen. A banker multiplies his liabilities to pay on demand, and keeps by him a sufficient amount of cash to insure the immediate payment of all claims which are likely to be demanded at one time. If pressure comes upon him he must sell some of the securities he has bought, or borrow money upon them

**Contrast between the Common Notions about Banking and the Reality**

**13.** Having now given an exposition of the actual facts and mechanism of Banking, it will be as well to contrast the Common Notions respecting it and the Reality

I. It is commonly supposed that Bankers are dealers in Money only, that they borrow Money from one set of persons and lend it to another set of persons

The fact is that Bankers are not dealers in Money: they never lend Money. The sole function of a Banker is to create and issue Credit: and to buy Money and Debts by creating and issuing other Debts in exchange for them

II. It is commonly supposed that Bankers act only as agents or intermediaries between persons who want to lend and those who want to borrow

Bankers never act as agents between persons who want to lend and those who want to borrow. Bankers buy money from some persons: and Rights of action from others: exclusively with their own Credit: or by creating and issuing Rights of action against themselves

III. It is commonly supposed that a Banker's profit consists in the difference between the interest he pays for the Money he borrows and the Interest he charges for the Money he lends

The fact is that a Banker's profit consists exclusively in the profit he can make by creating and issuing Credit in excess of the specie he holds in reserve

No Bank which issues Credit only in exchange for Money ever did, or by any possibility could, make profit. It only begins to make profit when it creates and issues Credit in excess of the Credit it creates in exchange for Money: when it begins to buy

Debts payable at a future time, for which it charges a Discount : which, according to Mill, as we shall presently see, is robbery !

And the whole of a Banker's profit consists in the quantity of Debts he can purchase with his own Credit

### *How Credit is Capital to a Banker*

#### **14.** It is now seen how **Credit is Capital to a Banker**

For what is the commodity which a Banker deals in and makes a profit by ? He opens his place of business and has an array of clerks with their desks, ledgers, &c. He then gives notice that he is ready to buy gold from any one who has it to sell. And what is the commodity with which he buys the gold, what does he give in exchange for it ? His own **Credit**. The commodity he gives in exchange for the gold is a Right of action to pay an equivalent of gold on demand, *i.e.*, his own Credit

He then gives notice that he is ready to buy good Commercial Debts—which are Credits or Rights of action—which any one has got to sell. And what does he buy these Credits, Debts, or Rights of action with ? Again with nothing but his own Credit—with Rights of action against himself. His own Credit is the commodity with which he buys these other Credits

The banker charges exactly the same price for his Credit as if it were Money. The only Commodity the banker has to sell is his own Credit—for which he charges exactly the same price as if it were Money. Hence he makes exactly the same Profit by selling his Credit as if he were selling Money

Now, as we have seen, Anything which gives a Profit is Capital. Hence, as a banker's Credit produces him exactly the same Profit as Money would, it is evident that his Credit is Capital to him just as much as Money is

Again Credits, Debts, or Rights of action are Goods, Chattels, Commodities, Merchandise

Now under the term Circulating Capital Smith expressly includes the Goods or Commodities in shops. The trader buys them at a lower price from one person and sells them at a higher price to another person : and so makes a Profit by them : and thus the Goods in the shop are **Capital** to him

And Adam Smith expressly includes Bank Notes or Banking Credits and Bills of Exchange under the term Circulating Capital

So a banker buys the Goods or Commodities termed Credits, Debts, or Rights of action from one person, his own customer, and sells them at a higher price to another person, namely the Acceptor or Debtor. The Debt the banker buys is increasing in value every day from the time he buys it until it is paid off. These Goods or Commodities termed Debts in the portfolio of a banker produce him a Profit just in the same way as the goods, commodities or merchandise in the shop produce profits to the trader

Hence the **Bills** in the portfolio of a banker are **Circulating Capital** exactly in the same way as the goods, commodities or merchandise in the shop of a trader are **Circulating Capital**

*On the Caution necessary in applying Mathematics to Economics*

**15.** We now see how necessary caution is in applying Mathematics to Economics : and how necessary it is to have a precise and accurate statement of facts, so that the Mathematics may be subservient to the facts, and not the mistress of them

Some distinguished Algebraists, such as Peacock and Tait, in acknowledging that Debts are Negative Quantities, put it in this way—"If Property (?) possessed or due could be denoted by a number or symbol with a Positive sign : a Debt would be denoted by a number or symbol with a Negative sign : or conversely. Such affections of Property (?) are correctly symbolised by the signs + and — : since they possess the inverse relations to each other which these signs require : for if to a person A there be given a certain property or sum of money, combined with or added to a Debt of equal amount, his Wealth or Property remains the same as before"

We have already several times pointed out that Algebraists are in error in applying the signs + and — in Economics to **Property** : they do not affect **Property**, but **Persons**

The mode of statement adopted by these Algebraists has a plausible appearance and a specious air of truth. If a person



were going to retire from business, he would call in and discharge his liabilities, and the remainder, if any, would be his fortune

It may also be conceded that if a person acquires a sum of money, and at the same time is charged with an equal amount of Debt, he is substantially no richer than before. But such a mode of statement is quite unsuitable for Economics, as is shown most clearly when applied to Banking. Because when a banker buys £10,000 in cash from his customers he is exactly in the position described by these Algebraists

He has bought £10,000 in cash from his customers, which becomes his actual property (+): but in exchange for them he has created an equal amount in Rights of action which are the Property (+) of his customers. But he engages to buy up these Rights of action from his customers or their transferees. That is, he has incurred Duties (—) to an equal amount. His Property is therefore correctly stated as + £10,000 — £10,000: and therefore he is substantially in the same position as he was before: *he* is neither the richer nor the poorer

But that is an extremely erroneous view to take of the matter as regards the science of Economics. Economics has only to do with the number of Economic Quantities in existence at any given instant, and with their exchangeable relations

Now when a banker acquires £10,000 in cash from his customer they become his property, which he may do with as he pleases: and his customers acquire £10,000 in Rights of action, which they may put into circulation and which have all the effects of Money itself. There are £20,000 of Economic Quantities in existence and circulation. His Duty to pay the £10,000 in cash has no effect on the amount of Economic Quantities in existence. By his action the banker has created **New Property** to the amount of £10,000: and when he pays any of the demands upon him so much of this **New Property** is cancelled and extinguished: and by so much his Property is diminished. But his Liability or Duty to pay these demands in no way diminishes his Property until they are actually demanded

These Rights of action are created by one exchange: and may be extinguished by another: but so long as they are in existence and circulation they are Economic Quantities like any

others. They have **Value** just for the same reason that any other Economic Quantities have : because they can be exchanged for money. They may circulate in commerce and effect exchanges or payments exactly like an equal sum of money

To show the subtle nature of the question, let us again consider the accounts between a banker and his customers. From the banker's point of view his assets, whether Cash or Bills, are his absolute Rights or Property, (+) : and his Liabilities are his Debts, or his Personal Duty to pay, (—) : and his accounts would be stated thus—

LIABILITIES		ASSETS	
		+	
Deposits - - - -	£49,600	Cash - - - -	£10,000
		Bills of Exchange -	40,000
	£49,600		£50,000

But from the customers' point of view, the case is reversed. The Bankers' liabilities are the absolute Rights or Property (+) of his customers : and the banker's Duty is to meet these claims out of his Assets (—). Hence, from the customers' point of view, the accounts would stand thus—

RIGHTS OF ACTION		BANKER'S ASSETS	
		—	
Deposits - - - -	£49,600	Cash - - - -	£10,000
		Bills - - - -	40,000
	£49,600		£50,000
		Balance + - - -	400

The balance of £400 is evidently the banker's own property

Hence, generally, the accounts between a banker and his customers may be stated thus—

		+	
Deposits - - - -	£49,000	Cash - - - -	£10,000
		Bills - - - -	40,000
	£49,000		£50,000
		Balance + - - -	400

where the upper or lower signs are to be taken according as they are regarded from the banker's or the customers' point of view

The fact is that every Obligation bears the double sign  $\mp$ : and these opposite signs do not cancel each other, as many writers suppose: but the Right of action is a saleable and exchangeable Quantity as long as it exists: and until it is paid off and extinguished: the Positive sign denotes the personal Right of action of the Creditor: and the Negative sign denotes the personal Duty of the Debtor to pay when required to do so: but until he is required to do so it in no way affects the Property he possesses so as to give his Creditors any claim or right to it

### *On the Scottish System of Banking*

16. The Credits, or Rights of action, created by bankers in the operations which we have been describing, were employed to buy Commercial Bills, which arose out of the **Transfer** of commodities: and it has been shown that they create Credit to several times the amount of the Cash in their possession. And some writers suppose that this is the limit of legitimate Credit. It is very commonly imagined that Credit can only be used to **Transfer** existing commodities

We have now to describe a species of Credit of a totally different nature, invented in Scotland, to which the marvellous progress of that country is mainly due: and which will sorely test Mill's dogma that Credit is Purchasing but not **Productive** power

It is Credit created, not for the purpose of transferring or circulating commodities already in existence: but for the express purpose of calling **New** Products into existence. It is entirely of the nature of **Accommodation Paper**: and it will show that there is nothing in the nature of Accommodation Paper more dangerous or objectionable than Real Paper, as it is called: but on the contrary that they stand on exactly the same footing of security: and also that Credit is equally applicable to call **New** products into existence, as to transfer those already in existence

When after a long period of inactivity the energies of a people

are suddenly turned into an industrial direction, they find innumerable enterprises which would be profitable if only they possessed the means of setting them agoing. The quantity of money which was sufficient for a non-industrial people is now found to be wholly inadequate for the increased demand for it : and the only consequence will be that if there is a greatly increased demand for the existing quantity of money, the Rate of Interest will rise enormously : and to such an extent as to preclude all possibility of profit from such enterprises even if effected

It is, therefore, invariably found, that whenever this takes place, multitudes of schemes are set afloat for increasing the quantity of money

For many centuries after the Conquest, England was essentially a feudal and military—an agricultural and pastoral people. Its Law was almost entirely feudal, and related to the tenure of land. Merchants and commerce were held in very subordinate esteem, and Commercial Law had no existence. In the sixteenth century the energies of the nation were absorbed in religious controversies : and in the first half of the next century in constitutional struggles and politics. At length in the reign of Charles II., men, weary of polemics and politics, began to devote themselves more to industry and commerce : and this was greatly stimulated by the manifest advantages of Banking, which had just been introduced into England

Among fields of enterprise at that period, none seemed more promising than agriculture. But unfortunately all the available Specie was absorbed in commerce : none was to be had for agriculture : or, at least, only at such rates as to be practically prohibitive

In no species of industry are the profits so moderate as in agriculture. Hence, if Capital has to be borrowed to effect improvements in agriculture, it is requisite that it should be at a very low rate of interest. The usual rate of interest in the time of Charles II. was 10 per cent. : and few improvements in agriculture could bear that. But by the introduction of Banking, and the foundation of the Bank of England the rate of interest in commerce was reduced to 3 per cent.

It was this real want, and the enormous advantage which

Banking had been to commerce, which gave rise to the schemes of Asgill, Briscoe, Chamberlen, Law, and others, for the purpose of creating Paper Money based upon Land: and to found Land Banks to assist agriculture as the Mercantile Banks had assisted Commerce, which were so rife at this period

One of these schemes was attempted to be carried out in 1696. The ministry of William III. was not, as is now the case, formed exclusively of one party of the State. William III. reigned and governed: and the ministry was his ministry, and not that of the Parliament, as it is now. His ministry was partly Whig and partly Tory. The Whig portion of it, who were in close connection with the mercantile community of the city, succeeded in founding the Bank of England in 1694: which was essentially a Whig project, and intended to assist the finance of the Government and commerce

The immense benefit of the Bank of England was so evident that the Tory portion of the ministry endeavored to found a Bank which should also assist Government, and besides that, be specially for the benefit of agriculture. It was attempted to be founded in 1696: and it was called the Land Bank. But the attempt did not succeed: and its failure was one of the causes which produced the stoppage of the Bank of England in 1697. There were, no doubt, defects in the scheme which fully accounted for its failure: but the want was very real: and the idea was perfectly sound

Among the projectors of a scheme for basing Paper Money on Land, the most celebrated was John Law. He has given an elaborate exposition of his Theory in a work entitled *Money and Trade Considered*: and he laid a scheme before the Parliament of Scotland in 1705, which they fortunately rejected: or there would have been a catastrophe in Scotland as great as that of the Darien Scheme in 1699. Law had the opportunity of reducing his theory to practice in France, in 1720, under the name of the Mississippi Scheme

This is not the place to give an account of Law's scheme which we have done elsewhere.<sup>1</sup> But ten years after its failure in France the Scotch Banks, by the admirable invention of Cash

<sup>1</sup> *Dictionary of Political Economy.* Art. Banking in France

Credits, pushed Credit to the utmost extent of its legitimate limits, and realised all that was practicable in the schemes of Asgill, Briscoe, Chamberlen, and Law. And it is to these Cash Credits that the principal progress of Scotland in agriculture and all public works is due, as well as the personal wealth of its merchants

Moreover, after the end of the seven years' War in 1763, an ingenious merchant devised a scheme of Land Banks in Germany : and it is to these Land Banks that the principal part of the progress of agriculture in central Europe is due

### *On Cash Credits*

**17.** The Bank of Scotland was founded in 1695 with unlimited powers of issue, both in amount and denomination. At first it only issued Notes of £100, £50, £10, and £5. Though several times urged to do so, they did not issue £1 Notes at first : but in 1704 they began to do so. The Bank received a monopoly of banking for 21 years : but in 1716, when the monopoly expired, it was not renewed

In the year 1727 the proprietors of the Equivalent Fund were endowed by Royal Charter with powers of Banking : and they assumed the name of the Royal Bank

In the very contracted sphere of commerce in Scotland at that time, there were not sufficient Commercial Bills in circulation to exhaust the Credit of the Banks. They had, as it were, a superfluity of unexhausted Credit on hand : and the Bank devised a new scheme for getting its Credit into circulation, which was the most marvellous development of Credit ever imagined

It agreed, on receiving sufficient guarantees, to open Credits of certain limited amounts in favor of trustworthy and respectable persons

A Cash Credit is a Drawing Account created in favor of a person who pays in no money, which he may operate upon precisely in the same manner as on an ordinary account : the only difference being that, instead of receiving interest on the daily balance of his account, as used formerly to be the case in Scotland, he is

charged interest on the daily balance at his Debit. A Cash Credit is, therefore, an **Inverse** drawing account

Cash Credits are applicable to a totally different class of transactions to those which give rise to Bills of Exchange. One difference being that Bills of Exchange arise out of the transfers of commodities, and are payable in one sum at a fixed date. Whereas Cash Credits are not issued on the transfer of commodities: or on any previous transactions. They are expressly intended to promote the formation of future products. They are not repayable at any fixed date: but they are a continuous working account which continues open as long as the operations are satisfactory

It is a condition of all Cash Credits that the persons to whom they are granted should accept all advances in the Bank's own Notes

In order to understand clearly the principles of the system, it is only necessary to recur to our fundamental Definition or Concept of Credit. Because a true fundamental Definition or Concept is the polestar to guide us through all difficulties and perplexities. "There is nothing in the world," said the Duke of Wellington, with his commanding good sense, "like a good Definition"

It has been shown in the preceding chapters that the true definition of **Credit** is the "**Present Right** or the **Present Value** of a **Future Profit**." And every **Future Profit**, from whatsoever source arising, or of whatsoever nature, has a **Present Value**, which may be recorded on any material, such as paper: and may be brought into commerce: and may be bought and sold and transferred by manual delivery, exactly like money, or any other material chattel

It has been shown that Land is an Economic Quantity, which produces a continuous series of profits: and that a trader exercising any profitable business is an Economic Quantity analogous to land, and produces a continuous series of profits

We have explained the complete system of **Mercantile Credit**: and shown that its true limits are the future profits of **Mercantile** traders. That all Credit is sound which is redeemed at maturity: and that **Mercantile Banking** consists in buying up the **Rights** to be paid out of these future profits of **mercantile** traders

Now having argued from the Land to Commerce, let us reverse the case, and argue from Commerce to the Land

If every future Commercial Profit has a Present Value, which can be brought into commerce and exchanged, the same is equally true of the Land, and of every commercial work, or enterprise. The Present Value of every future profit from Land or any commercial work can be brought into commerce, and bought and sold, exactly like the Present Values of the Future Profits of traders. And if the Credit be strictly limited, and redeemed by the future profits of the land or commercial work, Credit may be created to purchase the Present Value of these Future Profits from Land and commercial public works, exactly in the same way as it is created to purchase the Present Values of the Future Profits from traders

Cash Credits are applied to two different purposes—

1. To aid private persons in business
2. To promote Agriculture : and the formation of Commercial Works of all kinds

### **Cash Credits granted in aid of Persons**

**18.** Every man in business, however humble or however extensive, must necessarily keep a certain portion of ready money by him to answer immediate demands for small daily expenses, wages, and other things. This could, of course, be much more profitably employed in his business, where it might produce a profit of fifteen or twenty per cent. instead of lying idle. But unless the trader knew that he could command it at a moment's notice, he would always be obliged to keep a certain amount of ready money in his till, unless he were able to command the use of some one else's till

Now one object of a Cash Credit is to supply this convenience to the trader, and to enable him to invest the whole of his capital in his business : and, upon proper security being given, to furnish him with the accommodation of a till at a moment's notice, in such small sums as he may require, on his paying a moderate interest for the accommodation



Almost every trader in Scotland has a Cash Credit at a Bank by which he can draw out such sums as he may want for his daily business, and replace such as he does not want before the close of the bank hours.

Almost every young man in Scotland commencing business does it by means of a Cash Credit. Thus, for instance, lawyers, or writers to the signet, commencing business, have occasion for ready money from day to day, before they can get in payments from their clients. It is a great bar to any young man to commence the business of a solicitor without capital, which must either be furnished to him by his friends, or his own. It is an immense advantage to him, and to them, to have it supplied by a Bank, by means of a Cash Credit, on a mere guarantee, a mere contingency which they never would give if they thought there was any danger of its being enforced.

So the great employers of labor, manufacturers, builders, shipbuilders and others, have Cash Credits, by which they can pay their laborers.

These Credits are granted to all classes of society : to the poor as freely as to the rich. Everything depends upon **Character**. Young men in the humblest walks of life may inspire their friends with confidence in their steadiness and judgment, and they become sureties for them on a Cash Credit. This is in all respects of equal value to them as money : and thus they have the means placed within their reach of rising to any extent that their abilities and industry permit them. Multitudes of men who have raised themselves to immense wealth began life with nothing but a Cash Credit. As one example among thousands, Mr. Monteith, M.P., told the Committee of the House of Commons in 1826, that he was a manufacturer, employing at that time 4,000 hands : and that, except with the merest trifle of capital lent him, and which he soon paid off, he began the world with nothing but a Cash Credit.

The Banks usually limit their advances to a certain moderate amount, varying from £100 to £1,000 in general : and they take several sureties in each case. These cautioners, as they are termed in Scottish Law, keep a watchful eye on the proceedings of the

customer, and of inspecting his account with the Bank, and of stopping it at any time, if irregular. These Credits are not meant to degenerate into dead loans, but they are required to be operated upon by constantly paying in and drawing out

The enormous amount of transactions carried on by this kind of account may be judged of by the evidence given before the Committee of the Commons in 1826. It was then stated that on a Credit of £1,000, operations to the extent of £50,000 took place in a single week. Others stated that on a Cash Credit of £500, operations to the amount of £70,000 took place in a year. One witness stated that in a very moderately-sized country bank operations to the amount of £90,000,000 took place in twenty-one years : and that the whole loss to the bank during that period was £1,200

At that time it was conjectured that there were about 12,000 Cash Credits guaranteed by about 40,000 sureties, who were interested in the integrity, prudence and success of the customers. The witnesses before the Lords declared that the effects of these were most remarkable on the morals of the people

### **On Cash Credits granted to promote Agriculture and the Formation of Public Works**

**19.** We have now to consider the way in which the Scottish System of Cash Credits has been applied to promote Agriculture and the formation of all manner of Public Works

The two Scottish Banks which were first founded applied their Cash Credits to assist the industry of traders, and tended much to foster it. Agricultural industry had not then awoken. The Scots were a fierce, turbulent people, who thought a great deal more of harrying their neighbors than of peaceful agriculture. The land was bound down under the fetters of the feudal system. But after the suppression of the rebellion in 1746, the feudal system was to a great extent broken up, and a great spirit of enterprise awoke, and then, for the first time, Scotland became an industrial nation.

At this time there were in many parts of Scotland large tracts of reclaimable land and multitudes of people, but they remained

unemployed, because there was no money in the country to set their industry in motion

Now suppose that a proprietor of one of these tracts of land had had £10,000 in money: and that he had employed it in paying wages to laborers, and in buying seed to sow: then, in course of time, the value of the produce of the land would replace the sum expended in bringing the land into cultivation. Then the Money so employed would have been expended as **Capital**

But at that time, there was, comparatively speaking, no Money in the country. It was just then emerging from the bonds of feudalism. The chiefs had vast tracts of land, and no doubt lived in a state of rude abundance from their herds and flocks, and the natural produce of the soil. But commerce had never penetrated into these highland strongholds: and consequently the greatest chiefs were very seldom blessed with the sight of coin. But at this period began the transition from feudalism to industrialism, in which money was absolutely indispensable. It was at this time that the Banks, having habituated the people during 10 years to receive their £1 Notes in all respects as Money, and having acquired their thorough confidence, threw out branches in all directions, and sent down boxes of their £1 Notes

Farmers at that time had no votes in Scotland: and consequently the landlords had no motives to keep their tenants in political thralldom: as was too much the case in England. They adopted every means possible to develop the resources of the soil. And as it was not to be expected that the farmers would lay out their capital and industry on the soil without security of tenure, it became the custom, almost universal in Scotland, for landowners to grant their tenants leases of 19 years: and in many cases, for particular reasons, much longer than that

Upon the security of these leases, and also upon that of personal friends, the Banks everywhere granted Cash Credits to the farmers: the advances being made exclusively in their own £1 notes. From the strong constitution of the Banks, and the universal confidence they had acquired, their Notes were universally received as Cash: and though they were demandable in cash at the Head Office, no one ever dreamt of demanding payment for them

With these advances in £1 Notes, the farmers employed the laborers in reclaiming the land, bought seed and sowed the crops. The Notes were employed in exactly the same way as Money would have been : and they produced exactly the same effects as money would have done. The land was reclaimed, and sown, and stocked : and in a few years bleak and barren moors were everywhere changed into fields of waving corn : and they produced a continuous series of profits. With the value of the produce, the farmers gradually repaid the loans, and reaped a profit

Now if it be admitted that Money expended in agricultural improvements is used as **Productive Capital** : how can it be denied that Credit, employed in exactly the same way, and which produces exactly the same effects as Money, and produces exactly the same profits, is also equally **Productive Capital**?

The £1 Notes were universally received by the people as of exactly the same value as Money : and therefore they were in all respects Money : they produced exactly the same profits that Money did. Now as we have seen that "**Capital is Anything which produces a Profit**", it is evident that the £1 Notes were just as much **Productive Capital** as the Money

The only difference was that in using Money the employer made Capital of the **Realised Profits** of the **Past** : in using Credit he made Capital of the **Expected Profits** of the **Future**. But the results are exactly the same in either case

Every one acquainted with Scotland knows perfectly well that the prodigious progress in agriculture made in that country during the last 140 years has been almost entirely effected by means of these Cash Credits

Not only has almost the entire progress in agriculture been effected by these Cash Credits, but all public works of every description—Roads, Canals, Docks, Harbors, Railways, Public Buildings, &c., have also been made by means of Cash Credits

It was stated to the Committee of the House of Commons in 1826, that the Forth and Clyde Canal was executed by means of a Cash Credit of £40,000 granted by the Royal Bank. So when a Road has to be made, the Trustees obtain a Cash Credit, and pay it off out of the rates. So when a Railway, a Dock, a

Harbor, a Public Building, a Canal, is to be made, the Directors obtain a Cash Credit, and so pay the wages of the men. We have already in the preceding chapter, given the instance of the Market at Guernsey being built by Notes issued by the States, secured on the future profits of the Market. Many other Markets have been built by the same means. The great Cash Credit system of the Scottish Banks is absolutely the same thing, only on a prodigiously enlarged scale, and a more organised system

It is thus seen how Credit is applied to the **Formation** of **New Products** equally well as to the **Transfer** of existing ones. Credit is Purchasing Power equally as Money: and it may be applied to purchase **Labor** to form **New** products, equally well as to Transfer existing ones. The principle of the Limit, however, being exactly the same in both cases: namely, that it is the **Present Value** of the **Future Profit**

When Money is used to produce a Profit, it is expected that the Profit will replace the Money advanced: when Credit is used to produce a Profit, it is expected that the Profit will redeem the Debt incurred

Hence Credit can do whatever Money can do: but we have shown that Credit is the inverse of Money. Hence, in Mathematical language, all the propositions which are true with respect to Money are equally true with respect to Credit: only with the Sign changed

Exactly the same effects were produced in England by the use of Bankers' Notes. The success of the Bridgewater Canal had exactly the same effect as the success of the Liverpool and Manchester Railway, eighty years later. The period from 1776 to 1796 was just as great an era in canal making as the subsequent period in railway building, considering the wealth of the country at the respective times. In the course of twenty years, England, from being the most backward country in Europe in water communication, was covered with a network of canals such as no other country but Holland can boast. These canals were made by the Notes issued by the country bankers. Burke says that when he first came to London there were not twelve bankers

out of London. In 1793 there were 400. However, these bankers, not having the solid constitution of the Scottish Banks, were swept away in multitudes in the panics of 1793 and 1797. But, nevertheless, though the bankers were swept away, the solid results of their issues of Notes remained

Thus it is now clearly demonstrated that **Credit** may be used as **Productive Capital**, exactly in the same way, and in the same sense, and for all the purposes, that Money is

### *Remarks on the Scottish System of Cash Credits*

**20.** All these marvellous results, which have raised Scotland from the lowest depth of barbarism up to her present proud position in the space of 200 years, are the children of pure **Credit**. It is no exaggeration, but a melancholy truth, that at the period of the Revolution in 1688, and the foundation of the Bank of Scotland in 1695, partly owing to such a series of disasters as cannot be paralleled in the history of any other independent nation: partly owing to its position on the very outskirts of civilisation, and far removed from the humanising influence of commerce: divided into two nations, aliens in blood and language: Scotland was the most utterly barbarous and lawless country in Europe. And it is equally undeniable that the two great causes of her rapid rise in civilisation and wealth have been her systems of National Education and Banking

• Her system of Banking has been of infinitely greater service to her than mines of gold and silver. Mines of the precious metal would probably only have demoralised her people, and made them more savage than they were before. But her Banking system has tended immensely to call forth every manly virtue. It has taught them industry, steadiness, and moral rectitude. In the **Character** of her own people Scotland has found **Wealth** infinitely more beneficial to her than all the mines of Mexico and

• Peru

The express function of the Banks was to create Credits, Incorporeal entities, created out of **Nothing**, for a transitory existence: and when they had performed their functions vanish-

ing again into the **Nothing** from whence they came. And has not this **Credit** been **Capital**? Will anyone, with these results staring him in the face, believe that there are some persons who are supposed to be Economists who maintain that the results of **Credit** are purely imaginary! That **Credit** conduces nothing to Production and the increase of **Wealth**! That **Credit** only transfers existing **Capital**. But even if it did no more than that, it has been shown that **Circulation** or **Transfer** is one species of Production: as is indeed now admitted by all Economists of Note. And that these persons who say that **Credit** is **Capital** are such puzzle-headed dolts as to maintain that the same thing can be in two places at once!

Circulating Credits of all kinds have exactly the same effects as **Money**, both in circulating existing commodities, and in promoting the formation of new products. And they may be used as **Productive Capital** exactly in the same way, and in the same sense that **Money** is

It must be observed that all these **Cash Credits** are for a distinct purpose, quite different from the discount of **Mercantile Paper**. The marvellous results they have produced are due to a system of pure **Accommodation Paper**. They are not founded on any previous transactions: nor are they for the purpose of transferring existing commodities. They are created for the express purpose of bringing **New** products into existence: which but for them would either have had no existence at all: or at all events would have been deferred for a very long period, until solid **Money** could have been accumulated to effect them. They are founded on exactly the same principles as the discount of **Mercantile Bills**. In discounting **Mercantile Bills** the banker merely buys up the **Right** to a future payment to be made out of the profits of the transaction. In creating **Cash Credits** the Banker merely buys the **Right** to a future payment to be made out of the future profits of the land or other public works

The invention of **Cash Credits** has advanced the wealth of Scotland by centuries. We have an enormous mass of **Exchangeable Property** created out of **Nothing**, by the mere will of the Bank and its customers, which produces all the effects of solid **Gold** and **Silver**: and when it has done its work, it vanishes again

into Nothing, at the will of the same persons who called it into existence. Hence we see that the mere will of man has created vast masses of **Wealth** out of **Nothing**: and then having served their purpose, they are **Decreated** into **Nothing** from whence they came: which are—

“Melted into air, into thin air.”

But their solid results have by no means faded—

“Like the baseless fabric of a vision, leaving not a wreck behind”

On the contrary, their solid results have been vast tracts of barren moor converted into smiling fields of waving corn: the manufactures of Glasgow, Dundee and Paisley: the unrivalled steam-ships of the Clyde: great public works of all sorts: roads: canals: bridges: harbors: docks: railways: and many others: and poor young men raised up into princely merchants

What the Nile is to Egypt, that has her Banking System been to Scotland: and it was fortunate for her that the foundations of her prosperity were laid broad and deep before the gigantic fallacy was dreamt of that the Issues of Banks should be inexorably restricted to the amount of gold they displace: that no increase of money can be of any use to a country: and before Mill had proclaimed to the world that to create Credit in excess of Specie is robbery!

The reader will now perceive the gigantic utility of the £1 note system to Scotland: and comprehend the consternation and **fury** of the Scottish people when various attempts have been made by Parliament to suppress them. When Parliament suppressed £1 notes in England, in consequence of the evils they were alleged to produce, owing to the bad organisation of the English Banking system, before the monopoly of the Bank of England was first broken up in 1826, it was intended to have suppressed them also in Scotland. But all Scotland rose up against it: and, headed by Malachi Malagrowther, raised such a commotion that an inquiry was granted which first made the Scottish system of Banking understood, and the attempt was abandoned. Still, however, constant jeers and gibes were addressed to the Scotch people by persons who knew nothing about the subject, about their fatuous attachment to their dirty £1 notes. But the Scotch



knew their value to the country far better than their assailants. The Scotch knew that the prosperity of their country was bound up with the Cash Credits : and Cash Credits were bound up with the issue of £1 notes. To have suppressed the Scotch £1 notes at that time would have destroyed two-thirds of the business of the Banks. The extent of Commerce in Scotland at that time was not sufficient to support the public Banks. It was stated that at that time two-thirds of the business of the Scottish Banks consisted in Cash Credits : though we are informed that now, in consequence of the great development of Commerce, the ratio of Cash Credits to the mercantile business of the banks has considerably diminished

Happily, however, no such attempts will ever be made again, now that the subject is better understood. Parliament is, however, justified in taking any measures it may be deemed necessary to secure their perfect safety and convertibility. So completely has the tide of opinion changed, that the question now is whether £1 notes can be reintroduced into England. But with the present transitional state of Banking in England it is premature to discuss that question .

### *On the Land Banks of Germany, or Banks of Credit Foncier*

21. At the close of the Seven Years' War in 1763, the proprietors in Silesia found themselves in a state of inextricable embarrassment. The ruin and destruction caused by the war, and the low price of corn caused by the general distress, made them unable to meet their engagements. Interest and commission rose to 13 per cent. They obtained a respite of three years to pay their debts. To alleviate the distress arising out of this state of matters, a Berlin merchant named Büding invented a system of Land Credit which has been very extensively adopted in Germany, Russia, Poland, and lastly in France

Proprietors of land can no doubt borrow money on mortgage : but in every country such transactions are attended with many inconveniences. They have many expensive formalities to undergo, such as investigation of title, &c. Moreover, the difficulties and expense of transfer are usually very great : as each purchaser has

to undergo the same labor and expense. If the debtor fails to pay, the process of obtaining redress, or possession of the land, is usually very troublesome and expensive. The consequence of all these obstacles is, of course, to raise greatly the terms on which money can be borrowed on mortgage

The system of Government Funds suggested to Büding the idea of creating a similar species of Land Stock. The Government could usually borrow much cheaper than the landlords, because the title was sure and indisputable : and there was no impediment to the negotiability of their debts

Büding, therefore, conceived the idea of substituting the joint guarantee of all the proprietors for that of individuals : and establishing a book in which the Land Stock should be registered and be made transferable : and the dividends paid exactly in the same way as in the Public Funds. The Credit of the Association, therefore, was always interposed between the lenders and the borrowers. Those who bought the Stock looked only to the Association for the payment of their dividends : and the borrowers paid all interest to the Association, which took upon itself all questions of title and security. The whole of these obligations are turned into Stock, transferable in all respects like the Public Funds. Such is the general design of these Associations : they avoid the rock of creating Paper Money : while they greatly facilitate the application of Capital to the land. They in fact do nothing more than turn Mortgages into Stock

• These Associations are of two classes. The first are private Associations : and these again are divided into companies formed by borrowers : and those formed by lenders. The second are formed by the State, or provincial authorities

The system was introduced into Silesia in 1770 : Brandenburg in 1777 : Pomerania in 1781 : Hamburg in 1782 : West Prussia in 1787 : East Prussia in 1788 : Luneburg in 1791 : Esthonia and Livonia in 1803 : Seleswick-Holstein in 1811 : Mecklenburg in 1818 : Posen in 1822 : Poland in 1825 : Kalenburg, Grubenhagen and Hildesheim in 1826 : Wurtemberg in 1827 : Hesse Cassel in 1832 : Westphalia in 1835 : Galicia in 1841 : Hanover in 1842 : Saxony in 1844 : and France in 1852

The fullest information respecting these Banks is to be found

in the work by M. Jossean, from which these details are taken : and to which we may refer the reader who wants further information as to the different constitutions of these Associations

All these Land Banks make advances to about one half of the value of the land, in small bonds, chiefly varying from £5 to £100, bearing interest from  $3\frac{1}{2}$  to 4 per cent., transferable by indorsement or delivery : together with a small sum to form a sinking fund to redeem the principal, and defray the expenses of management

The holder of the bonds has security for their payment the whole Capital of the Company, and the lands specially mortgaged for them

The borrowers may pay either in money, or in the bonds of the Company, which they may purchase from the public : thus exhibiting another example of the universal doctrine that the Release of a Debt is always equivalent to a Payment in Money

These institutions have had the most marvellous effects in developing the agriculture of the countries in which they have been formed : exactly similar to the effects of Cash Credits in Scotland

Their Obligations have maintained through all crises—monetary, war, and revolutionary—a steadiness of value far beyond any other securities whatever, either Government or Commercial. Jossean says, that in a population of 27,827,990, the negotiable *Lettres de Gage*, or *Pfundbriefe*, amounted to 540,423,158 francs. In the revolutionary period of 1848, while the Prussian funds fell to 69 : the shares of the Bank of Prussia to 63 : and the shares in the railroads from 30 to 60 per cent. : the Land Bank Bonds, producing  $3\frac{1}{2}$  per cent. interest, stood at 93 in Silesia and Pomerania : at 83 in West Prussia : and at 96 in East Prussia

### *On the Clearing House*

**22.** One of the great improvements in modern times in the organisation of Credit is the institution of **Clearing Houses** : and as the effect of these, like everything else in Banking, is the subject of great misconception, we must explain their operation

It is usually stated that the Clearing House is an example of

the principle of Compensation, like that effected by the foreign merchants at the Continental fairs. In foreign treatises the Clearing House is usually called a *Maison de Compensation*, or *de Liquidation*. This however is a complete error

It has been shown that if any number of customers of the same Bank have transactions among themselves, and give each other Cheques on their accounts, any number of transactions may be settled by mere Transfers of Credit from one account to another without a single coin being required, so long as the receiver of the Cheque does not draw out the money

Such Transfers are *Novations*

The Clearing system is a device by which all the Banks which join in it are formed, as it were, into one huge Banking institution, for the purpose of transferring Credits from one Bank to another without the use of coin: just in the same way that Credits are transferred in the same Bank from one account to another without the use of coin

The Clearing House is, therefore, not a *Maison de Compensation*, but it is a *Maison de Novation*

Every banker has every morning claims on behalf of his customers against his neighbors, and they have claims on behalf of their customers against him. These claims are called Bankers' Charges. Formerly it was the custom for every banker to send out his clerks the first thing in the morning to collect these charges, which had to be paid in money or banknotes. Having collected these charges, he credited his customers with the sums due to him. Now when the banker had paid the charges against him there was of course so much credit extinguished. The money and bank notes collected by the banker became his actual property: but he was obliged to create an equal amount of Credit on behalf of his own customers: so that on the whole an exactly equal amount of Credit was recreated to what had been extinguished. And so the final result was that there was exactly the same amount of Credit in existence

But each of his neighbors had also claims on behalf of their customers against him. Consequently every banker was obliged

to keep a large amount of money and bank notes to meet these claims. By this a very large amount of money and bank notes had to be retained for the purpose of meeting these bankers' charges : it was simply transferred and re-transferred from bank to bank : it never got into general circulation at all so as to affect business or prices : and it could be made no other use of

It was stated before the House of Commons, many years ago, that one bank alone, the London and Westminster, was obliged to keep £150,000 in notes for this sole purpose. And if one bank alone, then comparatively in its infancy, was obliged to keep such a sum in notes idle for this purpose, what would have been the sum necessary to be retained at the present day by all the banks, if it were not for the Clearing House ?

To remedy this inconvenience an ingenious method was devised, it is said, by the banks at Naples in the 16th century. The banks instituted a central chamber to which each sent a clerk. These clerks exchanged their different claims against each other, and paid only the difference in money

By this means the different Credits were readjusted among the different customers' accounts just as easily as before : and a large amount of money and notes were set free for the purpose of circulation and commerce : and were in fact for all practical purposes equivalent to so much increase of Capital to the banks and to the country

This system was first adopted in this country by the Banks in Edinburgh. And we have now to show that no permanent extinction of Credit takes place as in Compensation : the final result is only a *Transfer of Credit*, that is a *Novation*

Suppose that a customer of the Commercial Bank has £100 in notes of the Royal Bank paid to him. He is then Creditor of the Royal Bank. He pays these notes into his account with the Commercial Bank. He desires the Bank as his agents to collect the proceeds of these notes from the Royal Bank, and to place the amount to his Credit

Suppose that in a similar way a customer of the Royal Bank has £100 in notes of the Commercial Bank paid to him

Then he is Creditor of the Commercial Bank. He pays these

notes into his account with the Royal Bank, and constitutes them his agents to collect the proceeds from the Commercial Bank and place them to his Credit

Each Bank is then Debtor to the customer of the other

The full way of proceeding would be for each Bank to send a clerk to the other to collect the notes in money. Each Bank then having obtained payment of the notes in money would place to the Credit of its customer, and put the money which would become its own property into its own till : just as if the customer had paid in the money himself

In this case it is evident that there is no permanent annihilation or extinction of Credit : because by the process each Bank, instead of being debtor to the customer of the other, becomes debtor to its own customer

Thus it is evident that in each case there is a *Novation* : and not a *Compensation*

This method of settling the claims of the customer would require £200 in money

The same result may be obtained in a much simpler way

Let the agents of the two banks meet

The agent of the Commercial Bank says to the agent of the Royal Bank—"In consideration of your giving up to me the notes held by your customer by which I am debtor to him, and so releasing me from my debt to him, I agree to credit my customer with their amount : and so become debtor to him "

This is a *Novation*

The agent of the Royal Bank says to the agent of the Commercial Bank—"In consideration of your giving up to me the notes held by your customer, by which I am debtor to him, and so releasing me from my debt to him, I agree to credit my customer with this amount, and to become debtor to him "

This is also a *Novation*

The agents of the two Banks then exchange notes : and each Bank having received £100 in its own notes—that is, being released from its debt to the customer of the other, which, as we have seen, is equivalent to a payment in money—enters the amount to the credit of its own customer

By this means each Bank, instead of being Debtor to the customer of the other, becomes Debtor to its own customer : and the use of £200 in money is saved

The release of the debt of each Bank to the customer of the other is the consideration for the creation of the debt to its own customer

No doubt the £100 of notes from each Bank are withdrawn from circulation and replaced in its own till. But an equal amount of Credit is created and placed to the Credit of each customer, so that upon the whole the quantity of Credit remains exactly the same

Thus the debt of each Bank to the customer of the other is extinguished by the new debt created in favor of its own customer

And the whole transaction consists of two *Novations*

The reason why the operations of the merchants at the Continental fairs were *Compensations* in which both Credits were extinguished : and the operations of the Clearing House are *Novations* in which new Credits are created, which pay and extinguish the prior ones, but create an equal amount of new Credits, so that the whole amount of Credit remains exactly the same as it was before, is this—

In the case of the merchants they were principals : they were mutually indebted to each other : when, therefore, they exchanged their mutual debts they were cancelled and extinguished : and no new debts were created to replace them

But in the case of the Clearing House the banks are not Principals : they are only Agents for their customers : consequently, when they receive their own notes, and so are released from their debts to the customer of the other, they are bound to create an equal amount of Credit in favor of their own customer : which cancels and extinguishes the former debts : but leaves exactly the same amount of Credit existing

Hence the Clearing House is a *Maison de Novation* : and not a *Maison de Liquidation* or *Compensation*

The system of clearing was adopted by the City bankers in 1776, but the Bank of England was not admitted to it. Nor were the Joint Stock Banks admitted to it till 1854: when the charges of the Joint Stocks pressed so heavily on the private bankers that they were obliged to admit them. The Bank of England was not admitted till 1864

The charges of the London bankers consist of Cheques and Bills of Exchange; and not in notes: but that makes no difference in the principles of the case. A Cheque or Bill on a bank by a customer who has funds on his account to meet it is in all respects equivalent to a note of the banker himself. They collect the Cheques and Bills due to their customers and rearrange the Credits due to the various parties exactly in the same way as if they were notes

Before 1864 the differences payable by the banks were settled by Bank Notes: and it is said that about £250,000 were required for that purpose

But in 1864, when the Bank of England was admitted, the system of Clearing was further improved: so that the use of Coin and Bank Notes is now entirely dispensed with

Every clearing bank keeps an account with the Bank of England: and the Inspector of the Clearing House keeps one also. Printed lists of the clearing banks are made out for each bank with its own name at the top: and the others placed in alphabetical order below it. On the left side is the Debtor's column, and on the right side the Creditor's. The clerk of the Clearing House then makes up the accounts between each bank, and the difference only is entered in the balance sheet according as it is Debtor or Creditor. A balance is then struck between the Debtor and Creditor side, and the paper delivered to the clerk who takes it back to his own bank. The balance is then paid to or received from the Clearing House. If the Bank is debtor it gives a white ticket to, and if it is creditor it receives a green ticket from the Clearing House. By this most ingenious system not a single coin or bank note is used: and the sums transferred by this means at the present time are about £7,000,000,000 a year





*How Mercantile Bills of Exchange are paid*

**23.** We have now to show how erroneous are the ideas of those writers who, like Torrens and Mill, and the Sect who supported the Bank Act of 1844, think that all Bills of Exchange are paid in Money or Bank Notes

All merchants and traders not only buy goods on Credit : but they also sell them on Credit. Hence they are not only indebted on their own acceptances to those from whom they have bought goods ; but they hold the acceptances of those to whom they have sold goods

Now a merchant knows when his own acceptances are coming due, and if he has not sufficient funds on his account to meet them, he has only two methods of providing for them. He must either sell his goods in the market, or he must discount the acceptances he holds with his banker. The latter is, of course, the preferable plan. Accordingly, when his balance is low, and his own acceptances are falling due, he simply takes a batch of the acceptances he holds, and discounts them with his banker, who buys them by creating a Credit, Debt, Right of action, or **Deposit** in his favor : and thus increases his balance

The merchant, of course, makes his own acceptances payable at his banker's : consequently on the day they mature and become Debts, they are simply Cheques. And the whole mass of Bills and Cheques pass through the Clearing House, and as we have shown in the description of the operations there, the whole transactions are settled by pure Transfers of Credit : without the use of a single Coin or Bank Note

Hence, in our present highly organised system of Credit, Bills of Exchange are not paid in Money or Bank Notes at all—except only in a very few isolated cases—but they are paid exclusively by the constant creation of new **Banking Credits**

Hence, in our present system, the constant creation of Banking Credits is a matter of vital necessity. If the London Bankers were suddenly to give notice that next day they would stop discounting, the result would be that 19 out of 20 merchants would be ruined

But more than that. As the merchants would of course exhaust all their means to maintain themselves, they would instantly draw their balances : and thus the bankers would draw upon themselves a **Run for Gold**

It is perfectly well understood by all bankers that "*An Excessive Restriction of Credit causes and produces a Run for Gold.*" And thus bankers and merchants will all come down in one universal crash

The truth of this is now perfectly well known : and will be shown in a future chapter to be verified by numerous instances : and will have to be fully discussed in explaining the policy and effects of the Bank Charter Act of 1844

As, therefore, the constant and uninterrupted creation of Banking Credits is an indispensable necessity to maintain the existence both of merchants and bankers, we shall have to consider under what conditions they are to be created

*On the Right of Foreign Banks to open Branches in London.*

**24.** We think it expedient to consider here a question which made a considerable stir some years ago—namely, the Right of Foreign Banks to open branches in London

In 1865 the National Bank of Scotland opened a branch in London : and the Bank of Scotland in 1872. The Charter of the Royal Bank did not permit it to bank out of Scotland : but in 1873 it obtained a Private Act, 36 and 37 Vict., c. cxxvii., with the full consent of the Bank of England and the English bankers—[What did they want that for ?]—to enable it to open a branch in London, and carry on business there, except only issuing Notes. The bill was carried through Parliament by Mr. Goschen : and the branch was opened in August, 1874. These were the only Scotch Banks which had then opened branches in London : and up to that time they had evoked no open hostility from the English bankers

But, in 1873, in consequence of the increasing connection between Glasgow and Cumberland, the Clydesdale Bank opened

three branches in Cumberland, at Carlisle, Whitehaven and Workington. This invasion of the English provinces by a Scotch Bank excited the vehement opposition of the English bankers, both private and Joint-Stock, and in April, 1874, Mr. Goschen, who had carried the bill of the Royal Bank through Parliament in 1873, at their instance brought in a bill to extrude the Scotch Banks from England!

Now in these days of competition : and as, for the purposes of trade and commerce, England and Scotland are one country, it seems somewhat surprising that this right should be questioned. No one questions the right of English Banks to open branches in Scotland if they choose to do so : and, in fact, several of the English Colonial Banks have agencies in Scotland. Why, then, should it be supposed that it is contrary to law for the Scotch Banks to open branches in any part of England?

Many of the Scotch Insurance Offices have opened branches in London and other English towns, and not a word of objection was ever offered by the English Insurance Offices, because they knew it would have been futile to do so. Why, then, should the right of the Scotch Banks to open branches in England be questioned, and their doing so excite ill-feeling on the part of English bankers?

The gravamen of the case lies in this. When the monopoly of the Bank of England was first broken up in 1826, it was provided that Joint Stock Banks might be founded and issue Notes : but not within 65 miles of London. If they carried on Banking business in London, they were obliged to discontinue their issue of Notes in the provinces

Now the National Provincial Bank was a great provincial Bank, and issued a large amount of Notes in the provinces. But it deemed it expedient to commence banking in London : and by the terms of the Act of 1826, it was obliged to give up its provincial issue of Notes. The union of banks, now called the Capital and Counties Bank, also became London bankers, and they were also obliged to give up their provincial issues. And these banks and their fellow English Bankers thought it extremely hard that they should have to give up their issues of Notes, when commencing banking in London, while the Scotch Banks could

maintain their issues in Scotland while they did business in London

It was somewhat strange, however, that while so much ill feeling was aroused against the Scotch Banks not a word was ever said against the National Bank of Ireland, which not only has its head office and numerous branches in London, but still maintains a large authorised circulation of Notes in Ireland

Mr. Stephen Cave, on behalf of the Government, moved an amendment to the second reading of Mr. Goschen's bill, that a select Committee should be appointed to consider and report upon the restrictions imposed, and privileges conferred, by law on bankers authorised to make and issue Notes in England, Scotland and Ireland respectively, which was carried without a division

This Committee began its sittings on the 19th April, 1875, and took evidence during 21 days : and reported the evidence to the House : but made no report on the evidence taken, and recommended its re-appointment in the next session. This, however, was not done. And the result was, as is invariably the case with Parliamentary Committees and Royal Commissions on such subjects, they left the matter exactly as it was

The primary object of the Committee was to ascertain the legality or the contrary of the Scotch bankers opening branches in London. It examined personally two very eminent Counsel, Mr. Fitzjames Stephen, Q.C., afterwards Mr. Justice Stephen and Sir Henry Thring, C.B., Parliamentary draughtsman to the Government, afterwards Lord Thring, as to the state of the law : and besides that, they had the written opinions of Sir James Scarlett (Lord Abinger), Sir Edward Sugden (Lord St. Leonards), Mr. Richards and Mr. Roundell Palmer (Lord Selborne)

We shall commence by stating the opinions given by these learned Counsel

Mr. Stephen gave it as his opinion among other things that—  
“No Joint Stock Bank which issues Notes anywhere, except the Joint Stock Banks in England, and more than 65 miles from London, may carry on business in any part of England”

He considered that all "foreign banks whatever, including under the name 'foreign' not only Continental Banks, but British Banks out of England : that is, Scotch, Irish and Colonial Banks, are forbidden by the Acts of Parliament to establish themselves in any part of England." (Q. 206)

He denied, for example, that the Bank of Amsterdam could open a branch in London. (Q. 207)

But as a matter of fact the National Bank carried on business in London, and had very numerous branches issuing Notes in Ireland. Many Colonial Banks carry on business in London : and the Crédit Lyonnais has more than one branch in London

Mr. Stephen admitted that he had never turned his attention to the question before : and that he had merely been instructed to look at the matter on behalf of the English bankers some two days or a week previously : and that he was somewhat biased by the side on which he was called. He also said that he had derived most of his information from the memorandum of Sir Henry Thring to be mentioned immediately

Sir Henry Thring differed so far from Mr. Stephen that he thought that the Scotch Banks might open branches in the provinces beyond the 65 miles limit, though he spoke rather doubtfully. (Q. 104, 106.) But he agreed with Mr. Stephen that it was illegal to open branches in London, or within the limit of 65 miles

He also presented a memorandum to the Committee containing numerous references to the second edition of my *Theory and Practice of Banking*, and stating certain general conclusions he had arrived at—"Such being the circumstances of the case, the first question is whether it is or it is not legal for Scotch Joint Stock Company Banks of issue to establish branches in England ? In answer to that question, it is submitted that the prohibitions contained in the Acts of 1697 and 1708, and repeated in 1800, are still in force, with the special modifications introduced by the Act of 1826, and are perfectly general in their terms, and extend to Scotch Banks of issue as well as to country banks of issue in England : and consequently that, with the exception of the Royal Bank of Scotland, which is empowered by Act of Parliament to

have a branch in London, all other branches belonging to Scotch Banks of issue in London, or within 65 miles thereof, are illegal. On the other hand, there does not appear to be any legal prohibition against the Clydesdale Banking Company establishing their branches in Cumberland, being at a distance of more than 65 miles from London."

Sir Henry Thring then presented some suggestions as to the policy of expelling the Clydesdale Bank by law from Cumberland, which we need not discuss, as of course every one is entitled to have his own opinion as to expediency and policy: and happily any such attempt would now be utterly abortive.

Having been expressly selected by the Law Digest Commissioners to declare the Law on all points relating to Bank Notes, and, moreover, having been frequently referred to in Sir Henry Thring's memorandum, I applied to the Chancellor of the Exchequer to be heard before the Committee: but he did not accede to my request. However, as the opinions given by the learned Counsel struck at such widespread interests, I addressed a letter to the *Daily News*, which appeared on the 8th May, 1875, showing that it was perfectly legal for the Scotch Banks to open branches in any part of England, so long as they did not issue Notes in England.

There were also published in the appendix the opinions given in 1833 by Sir James Scarlett, Sir Edward Sugden and Mr. Griffiths, on the question whether Joint Stock Banks of Deposit could be established in London previously to the clause in the Bank Act of 1833. These three Counsel held that they could not: they maintained that the words of the monopoly clause of 1697 and subsequent Acts included Banks of Deposit as well as of issue. As we have shown, this is an erroneous distinction. But Sir John Campbell, the Attorney-General, held the reverse, fully endorsing the discovery of Mr. Joplin in 1822: he held that the monopoly of the Bank of England was strictly confined to issuing Notes: and that it was perfectly legal at Common Law to establish Joint Stock Banks of Deposit. And upon that opinion the Government acted, and introduced the declaratory clause in the Bank Charter Act of 1833.

In 1855 the Clydesdale Bank took the opinion of Mr. Roundell Palmer (Lord Selborne) as to whether it was legal for them to open branches in London and other parts of England, and to carry on banking business, except only as to issuing Notes. Mr. Palmer gave it as his opinion that it was perfectly legal for them to do so. The opinion of Lord Selborne, therefore, exactly agreed with the opinion I published in the *Daily News* of the 8th of May, 1875

This case is an example of the futility of Committees of the House of Commons undertaking to investigate and determine questions of pure Law, on which the most eminent Counsel are in diametrical contradiction to each other

We have now to put the question on its purely legal basis. It entirely turns on the privileges of the Bank of England: and it is necessary to state exactly what these privileges are

The privileges of the Bank of England are a penal enactment against the rights of the rest of the commercial community: and, therefore, like all penal enactments, they are to be construed in the strictest manner possible. Nothing is contrary to Law except what is clearly forbidden by it: everything else is legal and permissible

At its first institution the Bank of England received no monopoly. The Act of 1697 only provided that *no other Bank should be established by Parliament*. At this time private banking partnerships might be formed, containing any number of partners whatever. But in 1709 it was enacted that no company or society exceeding six partners might borrow, owe, or take up any sum or sums of money on their bills or notes payable at demand, or at any time less than six months from the borrowing thereof, *in that part of Great Britain called England*

At that time no one had framed a definition of Banking. But it was supposed that issuing Notes payable on demand was what so constituted the essence of "Banking," that to prohibit persons from doing that, was to prohibit them from "Banking."

In order to strengthen the monopoly more effectually, it was enacted in the Bank Charter Act of 1742 that—

"To prevent any doubts that may arise concerning the

privilege or power given by former Acts of Parliament to the said Governor and Company of **Exclusive Banking**, and also in regard to the erecting any other Bank or Banks by Parliament, or restraining other persons from **Banking** during the continuance of the said privilege granted to the Governor and Company of the Bank of England, as before recited, it is hereby further enacted and declared, by the authority aforesaid, that it is the true intent and meaning of the Act that no other Bank shall be erected, established, or allowed by Parliament, and that it shall not be lawful for any body politic or corporate whatsoever united or to be united in covenants or partnership exceeding the number of six persons *in that part of Great Britain called England, to borrow, owe, or take up any sum or sums of money on their Bills or Notes payable at demand, or at any less time than six months from the borrowing thereof*, during the continuance of such privilege of the said Governor and Company, who are hereby declared to be and to remain a Corporation with the privilege of **Exclusive Banking** as aforesaid ”

These words, which were always contained in subsequent Bank Charter Acts, strictly define the privilege of the Bank of England. Its sole monopoly is that during the continuance of its charter, no Bank having more than six (now ten) partners shall issue Notes *in England* payable at less than six months date : but all other kinds of Banks and banking are left absolutely free

There is no doubt whatever that Parliament intended to confer an absolute monopoly of Banking on the Bank of England : but by strictly defining what they conceived Banking to consist in, they overshot their mark, and ultimately defeated their own purpose. There was no instance at that time of any Bank which did not issue its own Notes : nor any idea that a Bank could be carried on without issuing Notes. If there had been, Parliament would certainly have provided against it. If the words had been general and had given a simple monopoly of Banking, no other Bank of any other sort or description exceeding six persons could have carried on business in England. They did not, and could not be expected to foresee that Banking in populous cities could be carried on without issuing Notes. In order to make assurance



doubly sure, they gave what they conceived to be the definition or description of Banking: and the legal effect of so doing was to restrict the monopoly alone to that particular method of Banking so defined or described

After the crisis of 1825 the Bank consented to give up a portion of their monopoly: and in 1826 Joint Stock Banks were allowed to be formed and issue Notes beyond the distance of 65 miles from London: provided that they had no office, and did no business in London. If they did business in London they were obliged to give up their provincial issues

In 1793 the London bankers of their own accord discontinued issuing Notes: and showed that in such a place as London, what had never been imagined before, banking, or at least some kinds of it, can be carried on without issuing Notes, but by means of their equivalents—Cheques. About 1820 some Economists began to scrutinize the Bank Charter Acts, and maintained that Joint Stock Banks might be established, and carry on their business in the then manner of London bankers, without issuing Notes, which would be no infringement of the privileges of the Bank. A declaratory clause to that effect was inserted in the Bank Charter Act of 1833: and in consequence of this discovery, and this declared common law right, the London Joint Stock Banks were founded

Such is a simple statement of the Law of the case. And with respect to the Scotch Banks opening branches in London, or any other part of England, the sole question is—*Do they issue Notes payable at less than six months in England?* The clear answer is that they do not: and consequently they have an undoubted legal right to open branches in London, or any other part of England, if they choose. It would be perfectly legal for them to remove their head offices to London, and maintain their issues in Scotland: as the National Bank of Ireland has its head office and several branches in London, and maintains its issues in Ireland. As a matter of fact any bank in any part of the world has a legal right to open branches in London or in any part of England, so long as it does not issue Notes payable in less than six months in England

No doubt it is a grievance that the National Provincial Bank was obliged to abandon its lucrative country issues on commencing business in London : as the Capital and Counties Bank has also had to do : and as every country Bank will have to do that establishes its head office in London. But, whatever the hardship or the injustice of the case may be, the remedy certainly does not lie in a puerile attempt to deprive the Scotch Banks of their legal rights : but rather in the revision and rectification of the chaotic mass of absurdity of the present banking system of England, which the logic of events will assuredly in course of time force on the Government

*On the Transformation of Temporary Credit into Permanent Capital*

**25.** We shall now give an example of the doctrine that the **Release of a Debt** is in all cases equivalent to a **Payment in Money**, which may surprise some of our readers, and of which we have not seen the slightest notice anywhere else

When it is published to the world that the Bank of England has a paid up Capital of £16,000,000 : and that the several Joint Stock Banks have paid up Capital of some millions, most persons take it for granted that the Banks have these sums paid up in hard cash

Nevertheless this is a profound error. Of course it is impossible for any outsider to have any precise knowledge as to how much of these amounts was ever paid up in actual money. But it may probably be said with safety that not so much as one half of these various amounts was ever paid up in real money : but by another method which we shall now describe : by which it will appear that at least one half of these millions of "Capital" was never anything more than the Bank's own Credit turned into "Capital"

To explain this, we may observe that the first subscription to the Bank of England was £1,200,000 : paid of course in actual money. It was advanced to Government, and the Bank was allowed to issue an equal amount in Notes, which were of course an augmentation of the Currency

In 1696 the Bank stopped payment, and its Notes fell to a discount of 20 per cent.

In 1697 Parliament undertook the restoration of public credit: and it was determined to increase the Capital of the Bank by £1,000,000. But not one penny of this was paid up in actual money

The Act directed that £800,000 of the subscription should be paid up in Exchequer Tallies, or Exchequer Bills: and the remaining £200,000 in the Bank's own depreciated Notes: which were received at their full value as Cash

Thus, of its first increase of Capital £200,000 consisted of its own depreciated Notes. The Bank was authorised to issue an additional amount of Notes equal to its increase of Capital. At subsequent increases of Capital the subscribers might pay up any amount they pleased in the Bank's own Notes, which were always held as equivalent to a payment in Money: and an increase of Capital

In 1727 the Bank of Scotland increased its Capital. The subscription was paid up partly in the Bank's own Notes. An outcry was made against this. But the Directors justly answered—"But the objectors do not at all consider this point, for the payments are many of them made in specie: and Bank Notes are justly reckoned the same as specie, when paid in on a call of stock, because when paid in, *it lessens the demand on the Bank*"

Hence the Directors clearly understood that the *Release of a Debt* is in all respects equivalent to a *Payment in Money*

The Bank had issued its notes, and were, of course, Debtors to the holders of them. These Debts were Negative Quantities. The subscribers might either pay in Money: which was  $+ \times +$ : or Release the Bank from its Debts: which was  $- \times -$ : and the effect of either transaction was exactly the same. At every increase of Capital the same operations would be repeated: payment in Money and in the Bank's own Notes would always be treated as equivalent. And hence, at every fresh increase of Capital a certain amount of the Bank's own **Temporary Credit** was turned into **Permanent Capital**

Thus we see that the Parliament of England and the Directors of the Bank of Scotland, who were probably equally innocent of

Roman Law and Algebra, simply from their own mercantile instinct treated the **Release of a Debt** as in all respects equivalent to a **Payment in Money**

Banks, therefore, which issue Notes may increase their Capital by receiving their own Notes in payment : by which they turn their own Credit into Capital. But Banks which do not issue Notes may increase their Capital exactly in the same way. A customer of the Bank who has a balance at his Credit is in exactly the same position as a Noteholder. If he wishes to subscribe to an increase of Capital he simply gives the Bank a Cheque on his account. This is equally a Release from a Debt as a payment in the Bank's own Notes : and an increase of Capital

If the customer has not sufficient on his account to pay for the stock he requires, he may bring the Bank bills to discount. The Bank discounts those bills by creating a Credit, or Deposit, in his favor : which, of course, is a Negative Quantity exactly like a Bank Note. The customer then gives the Bank a Cheque on his account—that is, he Releases the Bank from the Debt it has created : and that Debt released becomes increase of Capital.

This is the way in which the Capital of all Joint Stock Banks is increased : and it may go on to any extent without any payment in Money. And, consequently, it is wholly impossible for any one who has not had access to the books of the Bank, to ascertain what proportion of the Capital consists of payment in Money : and what proportion consists of the Bank's own **Temporary Credit** turned into **Permanent Capital**

### *On the Economical Effects of Banking*

**26.** Having now given an exposition of the actual mechanism of the different kinds of Banks, and shown the entire erroneousness of the notions of Banking which are still prevalent in this country, we can observe its Economical effects

The business of a Bank is not to borrow Money from one set of persons to lend to another—it is to build up a superstructure of Credit on a given basis of Bullion several times exceeding its amount, which Credit is intended to circulate and produce all the effects of Money

And every one who has understood the mechanism of Banking has seen that it practically augments the Capital of the country

Thus John Law says that the Bank of Scotland, on a basis of £10,000 in Money, was able to maintain £50,000 of its Notes in circulation : which he says was equivalent to so much additional Money to the country<sup>1</sup>

He also says<sup>2</sup>—"The introduction of Credit by means of a Bank augments the quantity of Money more in one year than a prosperous commerce would do in ten," *i.e.*, by creating circulating Credit

So Bishop Berkeley, after proposing many wise queries on Money and Credit, says that a Bank is a Gold Mine, and asks whether it is not the true philosophers' stone ?

Alexander Hamilton, the celebrated financier of the United States, in presenting a Report to Congress on the advantages of founding a National Bank, says—

"The following are among the principal advantages of a Bank—

"First : the augmentation of the active or Productive Capital of a country . . . . It is a well established fact that Banks in good Credit can circulate a far greater sum than the actual quantum of their Capital in gold and silver . . . . This faculty is produced in various ways—

"(1) A great portion of the Notes which are issued and pass current as Cash are indefinitely suspended in circulation from the confidence which each holder has that he can, at any moment, turn them into gold and silver

"(2) Every loan which a Bank makes is, in its first shape, a Credit given to the borrower in its books, the amount of which it stands ready to pay, either in its own Notes, or Gold or Silver, at his option. But in a great number of cases no actual payment is made in either . . . . The same circumstances illustrate the truth of the position, that it is one of the properties of banks to *increase the active Capital of a Country*. This additional employment given to Money, and the faculty of a bank to lend

<sup>1</sup>*Money and Trade considered*

<sup>2</sup>*Lettres sur les Banques*

and circulate a greater sum than the amount of coin, are to all the purposes of trade and industry an absolutely **Increase of Capital**. Purchases and undertakings in general can be carried on by means of Bank Paper, or Credit, as effectually as by an equal sum of gold and silver. And thus, by contributing to enlarge the mass of industrious and commercial enterprises, banks became nurseries of national wealth—a consequence as satisfactorily verified by experience as it is clearly deducible in theory ”

So J. B. Say says—“ If Bills of Credit could replace completely metallic Money, it is evident that a Bank of Circulation veritably augments the sum of National Wealth : because in this case, the metallic wealth becoming superfluous as an agent of circulation, and nevertheless preserving its own value, becomes disposable and can serve other purposes. But how does that substitution take place ? What are its limits ? What classes of society make their profit of this interest of the *new fund added to the Capital of the nation* ?

“ According as a bank issues its Notes, and the public consents to receive them on the same footing as metallic money, the number of monetary units increases

“ If, suppose, it issues one hundred millions of Notes, it will withdraw, perhaps, forty millions in specie, which it will put in reserve to meet the payments which may be demanded of it. Therefore, if it adds to the quantity of money in circulation, and if it withdraws forty millions from circulation, it is as if it added **only sixty millions**

“ We wish now to learn what class of society enjoys the use of this **New Capital** ”

Say then goes on to explain how this **New Capital** is employed, and who reaps the benefit of it

And J. B. Say is the writer who said that those who say that Credit is Capital maintain that the same thing can be in two places at once ! !

Gilbart says—“ Bankers also employ their own **Credit** as **Capital**. They issue Notes promising to pay the bearer on demand. As long as the public are willing to take these **Notes** as gold, they produce the same effects. The banker who makes

advances to the agriculturist, the manufacturer, or the merchant, in his own Notes, stimulates as much the productive powers of the country, and provides employment for as many laborers, as if, by means of the philosophers' stone, he had created an equal amount of solid gold. It is this feature of our banking system that has been most frequently assailed. It has been called a system of fictitious Credit—a raising the wind—a system of bubbles. Call it what you please, we will not quarrel with names: but by whatever name you please to call it, it is a powerful instrument of production. If it be a fictitious system, its effects are not fictitious: for it leads to the feeding, the clothing, and the employing of a numerous population. If it be a raising of the wind, it is the wind of commerce, that bears to distant markets the produce of our soil, and wafts to our shores the productions of every climate. If it be a system of bubbles, they are bubbles which, like those of steam, move the mighty engines that promote a nation's greatness and a nation's Wealth."

What Gilbart says about Notes is all true: but he omits to mention that Banking Credits circulated by means of Cheques have exactly the same effects as Banking Credits which are circulated by Notes

### *Demolition of the "Wages Fund" Theory*

**27.** The exposition of the actual mechanism of Banking which we have given, demolishes a Theory which was long held by some Economists, commonly called the "**Wages Fund**" Theory: though we believe that all Economists of repute have now abandoned it

A considerable number of Economists stoutly maintained that Wealth is to be restricted to material things only, such as Money.

They then contended that Wages are paid exclusively in material Money: and they called the quantity of Money paid in Wages the "**Wages Fund**," and maintained that it could not be exceeded. Capital, they insisted, was composed only of material things, and savings of the past

They then maintained that Wages depend on the ratio between Capital and population

This was an error to begin with : because all the Money spent as Wages, is not used as Capital, *i.e.*, expended with the intention of making a profit by it

A very large portion of Money spent as Wages is not Capital, but an expenditure of Income

Wages only spent for the purpose of profit : such as agricultural, manufacturing and commercial wages, are Capital

Now there is an important difference between Wages spent as Income and Wages laid out as Capital. In the former case there is no limit to them but the absolute rule of Supply and Demand : in the latter case there is

If I want professional services of the highest order, there is no limit to the price which must be paid. A surgical operation of great delicacy, which may only last a minute or two, may perhaps cost £150, when performed by a person of the most eminent skill. On one occasion a very eminent counsel received £2,000 for half-an-hour's work. So the wages paid to servants of all sorts are only determined by the Law of Supply and Demand

But when Wages are laid out as Capital, the case is different. In such cases the amount which a Capitalist can afford to pay as wages is limited and controlled by the profits which he expects to make by the sale of the product. If the price of the product could be forced up indefinitely, wages might no doubt be forced up indefinitely. But that is very far from being the case. No expenditure upon a product can force up its price indefinitely. The value of the product is solely governed by the great general Law of Supply and Demand. And as no Capitalist can continue to produce for any length of time unless he receives his usual profits, he cannot afford to give more as Wages than will allow him to obtain that profit. Hence, if he cannot reduce wages, he must cease to produce. Thus, in all cases of Wages expended as Capital, there is a natural cast-iron limit which they cannot exceed, however much they may fall short of it

We shall now allow the originators of the Wages Fund Theory to speak for themselves

Senior says that the proximate cause which decides the rate



of wages is the extent of the **Fund** (What Fund?) for the maintenance of laborers compared with the number of laborers to be maintained

Jones, who expressly confines **Wealth** to material objects only, says that **Wages** depend upon the amount of **Wealth** devoted to maintaining laborers

"The amount of **Wealth** devoted to the maintenance of labor constitutes the **Labor Fund** of the world, and the amount so devoted in any country constitutes the **Labor Fund** of that country

"The third division of the **Labor Fund** consists of what is properly called **Capital**, that is of the stored-up results of past **Labor**, used with a view to profit"<sup>1</sup>

But is this the fact? Are **Wages** only paid out of the **Money** which is the result of past savings? Are **Wages** only paid in specie? No one who has the slightest acquaintance with practical business can fail to perceive that such an idea is altogether erroneous. Every practical man knows that enormous masses of **Wages** are paid in **Credit**

Mill, himself, says<sup>2</sup>—"When **Paper Currency** [*i.e.*, **Credit**] is supplied in our country by bankers and banking companies, the amount is almost wholly turned in **Productive Capital**. . . . So employed it yields like any other **Capital**, wages of labor, and profits of stock. . . . The **Capital** itself, on the long run, becomes entirely **Wages**, and when replaced by the sale of the produce, becomes **Wages** again: thus affording a perpetual fund for the maintenance of **Productive Labor**: and increasing the annual produce of the country by all that can be produced by the means of a **Capital** of that value"

He also says<sup>3</sup>—"An effect of this latter character naturally attends some extensions of **Credit**, especially when taking the form of **Bank Notes**, or other instruments of **Exchange**. The additional **Bank Notes** [*i.e.*, **Credit**] are in ordinary course first issued to producers and dealers, to be employed as **Capital**

<sup>1</sup> *Lectures on Political Economy*, pp. 114, 414, 415, 420

<sup>2</sup> *Princ. of Pol. Econ.*, Bk. II., ch. 12, § 5

<sup>3</sup> *Princ. of Pol. Econ.*, Bk. III., c. 2, § 1

These are the doctrines which we have fully exemplified in the operations of the Cash Credits of the Scotch Banks. The whole of the agricultural improvements, Canals, Docks, Harbors, Railways, and Public Buildings, were constructed by laborers : and whence was the Fund provided which furnished their Wages? Simply from the Banks issuing their £1 Notes

And yet it is the very same Mill who sneers at the imbecility and the confused ideas of those who say that Credit may be used as Capital !

“Credit,” he says,<sup>1</sup> has a great, but not, as many people seem to suppose, a magical power : it cannot make something out of nothing. *How often is an extension of Credit talked of as equivalent to a creation of Capital, or as if Credit actually were Capital !*”

Mill says<sup>2</sup>—“Since, therefore, the rate of Wages which results from competition distributes the whole Wages Fund among the whole laboring population”

Mill lays it down as a fundamental proposition that “*Industry is limited by Capital.*” But what intelligible meaning can be given to this expression, unless we first distinctly define what Capital is ?

All the writers who support the Wages Fund Theory affirm that it consists of Capital, which they say is only the accumulation of the savings of the *past*. They maintain that it is only increased Capital that can lead to the increased employment of labor, and that that increased Capital can only arise from the increased savings of labour

Mill also says that Credit is not Productive Power : and that the Productive Funds of the country are not increased by Credit : in flat contradiction to his express statements in the preceding paragraphs

As a matter of fact, Credit forms at least 99 per cent. of the Productive Capital of the country

• Thus we see at every turn in Economics the indispensable necessity of establishing clear and distinct Concepts and Definitions of Wealth, Credit, Capital, &c. Modern Commerce is

<sup>1</sup> *Princ. of Pol. Econ.*, Bk. III., ch. 2, § 1

<sup>2</sup> *Princ. of Pol. Econ.*, Bk. II., ch. 12

utterly unintelligible unless **Credit** is included under the term **Capital** : and the doctrine that Industry is limited by Capital is utterly false, if Capital be restricted only to Money, the realised savings of the past

The Wages Fund consists of Money together with **Credit**—the realised profits of the past, together with the expected profits of the future : as we have over and over again set forth—*Every future profit has a Present Value*—and that **Present Value** may be brought into commerce and made Capital of as part of the Wages Fund, exactly in the same way as Money, the accumulation of the past

*On John Stuart Mill's notions on Banking and Currency*

**28.** Having now given an exposition of the actual mechanism and Economical effects of Banking, we are constrained to contrast them with the dogmas of John Stuart Mill, not from any love of controversy, which we cordially dislike, but simply because Mill's work is the one which is still usually put into the hands of unfortunate students of Economics

Mill says<sup>1</sup>—"Further consideration showed that the uses of Money are in no respect promoted by increasing the quantity which exists and circulates in a country : the service which it performs being as well rendered by a small as by a large aggregate amount"

This certainly is somewhat startling doctrine. If only a certain amount of work could be done there would be something true in it. But in almost all countries is it not possible to develop new works and new industry by introducing new Capital? According to this dogma, the introduction of new Capital into a country can do it no service. But do not facts everywhere rise up in contradiction to such a dogma? It is usually supposed that the very thing which poor countries want is the introduction of new Capital. Of course, if the introduction of new Capital can do no good, the withdrawal of Capital can do no harm

- How could the colossal Commerce of England be carried on

<sup>1</sup> *Preliminary Remarks* p. 4.

without the thousands of millions of Credit in the form of Bills of Exchange, Bank Credits, and Trade Credits? Does any sane man suppose that the present commerce of England could be carried on if all the forms of Credit, which every Economist of repute knows perfectly is equivalent to an augmentation of so much money, were annihilated, and nothing but the paltry amount of gold and silver left?

Has not the prodigious increase of the Wealth of Scotland during the last 150 years been mainly due to the Cash Credits of the Scotch Banks? And the same is true in a lesser degree of Ireland. Have not most of the Indian Railways been constructed mainly by the supplies of British Capital poured into the country? Is not every country in the world clamoring for British Capital? Even in the United States have not vast amounts of enterprise been developed by British Capital? If the Scottish system of Banking could be gradually and cautiously introduced into India, it would give a prodigious stimulus to the Wealth of India: and perhaps even render her independent of British Capital.

Mill again says<sup>1</sup>—"Another of the fallacies from which the advocates of an inconvertible Paper Currency derive support, is the notion that an increase of the Currency quickens industry. The idea was set afloat by Hume in his essay on Money, and has had many devoted adherents since."

Have not the prodigious creations of Credit quickened industry?

Any one who had the least experience of practical business, and will study the practical effects of Banking, knows that it is no fallacy at all that an increase of Capital, either by the introduction of fresh Money or by the creation of Credit within legitimate limits, quickens industry. But of course this does not mean Credit without limit: but Credit created within certain strictly defined scientific limits.

Mill's dogmas would certainly not meet with acceptance from statesmen or from practical men of business.

Mill further says<sup>2</sup>—"A banker's profession being that of a **Money Lender**, his issue of Notes is simply an *Extension* of his ordinary occupation."

<sup>1</sup> Bk. III., ch. 13, § 6

<sup>2</sup> Bk. III., ch. 22, § 2

We have shown that it is a total misconception of the nature of the business of Banking to say that it consists in **Lending Money**. The business of a banker consists in buying Money and Debts by creating other Debts, which may exceed several times the amount of Cash he holds, which may be circulated either by means of Notes or Cheques : and are equivalent in all respects to the creation of an equal amount of Money

Issuing Bank Notes, therefore, is not an *extension* of a banker's ordinary business. It is the very essence of his business. Formerly banking was defined to consist in issuing Notes. In the present day Cheques have to an immense extent superseded Notes. The very essence of Banking is to create Credit : and whether these Credits are circulated by means of Notes or Cheques in no way alters the nature of Banking : but is a pure matter of convenience

Mill then says<sup>1</sup>—" But if the Paper Currency is convertible, Coin may still be obtained from the issuers in exchange for Notes. *All additional Notes, therefore, which are attempted to be forced into circulation after the metals have been completely superseded, will return upon the issuers in exchange for coin* "

He also says<sup>2</sup>—" When metallic money had been entirely superseded and expelled from circulation by the substitution of an equal amount of Bank Notes, any attempt to keep a still further quantity of Paper in circulation must, if the Notes be convertible, be a complete failure. The metals would, as before, be required for exportation, and would, for that purpose, be demanded from the Banks to the full extent of the superfluous Notes, which thus could not possibly remain in circulation "

The preposterous folly of these dogmas is shown by the fact that when the Bank of Scotland was founded, although it was the only Bank in Scotland, upon a deposit of £10,000 in money by its shareholders, it was able to maintain £50,000 of its Notes in circulation, which John Law justly says was equivalent to an augmentation of the money of the country

At the present day the English Joint Stock Banks usually keep a reserve of about one-tenth in cash to support the circulation of their Credits : and they have about £800,000,000 of Deposits or Bank Credits

<sup>1</sup> Bk. II., ch. 13, § 1

<sup>2</sup> Bk. III., ch. 22, § 3

But in Scotland, where the system of Credit is more perfectly and highly organised than in England, the Bankers only find it necessary to keep cash to the one twenty-second part of their Credits in various forms. Upon a reserve in cash of about £4,500,000 they maintain in circulation Credits not far short of £100,000,000

According to Mill's dogmas, such a state of things would be impossible : but all the Credit created in excess of the Cash held would at once return upon the Banks for payment ! This shows the folly of men writing books and setting themselves up as a guide upon matters of which they do not take the least pains to inform themselves

Mill then says<sup>1</sup>—"The substitution of Paper for Metallic Currency is a national gain : *any further increase of Paper beyond this is a form of Robbery!*

"An issue of Notes is a manifest gain to the issuers, who, until the Notes are returned for payment, obtain the use of them as if they were real Capital, *and so long as the Notes are no permanent addition to the Currency*, but merely supersede gold or silver to the same amount, the gain of the issuers is a loss to no one : it is obtained by saving to the community the expense of the more costly material. But if there are no gold and silver to be superseded—if the Notes are **added** to the Currency, instead of being substituted for the metallic portion of it—all holders of Currency lose by the depreciation of its value the exact equivalent of what the issuers gain"

Now how is it possible for a banker to make a profit by issuing Notes if he is obliged to keep an exactly equal quantity of gold ? How, on such a system, is the community saved the cost of the more costly material ? No Bank ever constructed on this principle ever did, or by any possibility could, make profits

Now Mill asserts that for a Banker to create Credit in excess of the Cash he holds is Robbery !

But all profits in Banking are made by creating Credit in excess of Cash

Therefore, all profits made in Banking are **Robbery!!**

<sup>1</sup> Bk. III., ch. 13, § 5

Certainly Mill is an Economist who ought to be very popular among bankers

But if it is Robbery for bankers to create Credit in excess of the gold they hold, it must be equally robbery for merchants to create Credit in excess of the gold they hold

Now merchants create Credit, not because they have gold at the time they create it : but because they expect to be in possession of gold, or its equivalent, at the time the bill falls due

We have shown that John Law, Say, Hamilton, Gilbart, and all persons practically conversant with the mechanism of banking, declare that if a Bank can maintain in circulation a quantity of Credit in excess of the Cash it holds, that is for all practical purposes, an augmentation of the Capital of the country

But Mill declares that it is **Robbery** !

Such is the beautiful harmony of doctrine among Economists !

We have now pursued our distasteful task sufficiently far to show what an untrustworthy guide Mill is on all matters relating to Banking and the Currency. If we had chosen, we could have shown his inconsistencies and self-contradictions at much greater length : but that would have been far too great a tax upon the patience of our readers : and what we have shown is amply sufficient for our purpose

## CHAPTER X

## ON THE FOREIGN EXCHANGES

*Definition of an Exchange*

1. An “**Exchange**” in commerce is when a person pays a Debt he owes to a Creditor by transferring to him a Debt due to him from some one else

It is a *Delegatio* : or one form of a *Novatio*

Thus where a person pays his Creditor by a Bank Note or by a Cheque on his banker : or by drawing a Bill of Exchange on another person : it is an “**Exchange**”

Two passengers are travelling in an omnibus. The fare is sixpence, one passenger pays the conductor a shilling. The conductor is then indebted to that passenger in sixpence. Another passenger has a sixpence in his hand ready to pay his fare. The conductor by a nod tells him to give the sixpence to the first passenger. By this operation both Debts are paid. The Debt of the conductor to the first passenger : and the Debt of the second passenger to the conductor : are paid by one operation. The whole transaction is an “**Exchange**”

• Out of these tiny germs is developed the whole vast and complicated system of the Foreign Exchanges

Three parties and two Debts are thus necessary to an “**Exchange**”

The “**Exchanges**” is that branch of Commerce which treats of the remission and settlement of Debts between parties living in different places either within or beyond the limits of the same country : and of the Exchange of the Money of one country for that of another

The State of the Exchanges between any two places or countries depends upon two distinct things—

1. The State of the Moneys of the two places



2. The State of the Commercial dealings between the two places

The State of the Exchanges which depends on the state of the Moneys of the two places is called the **Nominal Exchange**

The State of the Exchanges which depends on the state of Commercial dealings between the two places is called the **Real**, or the **Commercial Exchange**

### *On the Nominal Exchange*

2. For the due understanding of the Exchanges, we may refer our readers back to the fundamental principles of Bullion and Coin in a previous chapter

Suppose that the Coinages of two countries are made of the same Metal, and the Coinage of one country is taken as the standard: then the Quantity of the Coin of the **other** country, which contains exactly the same Quantity of pure Metal is called the **Par of Exchange** between the two countries

Suppose that the Exchanges between England and France were estimated in Gold. There is as near as possible one-fourth more pure Gold in an English sovereign than in a French 20-franc piece

If the English sovereign were taken as the standard, it would be equal to 1.25 of a 20-franc piece: and 1.25 would be the par of Exchange between England and France

The Exchanges between England and France are, however, not estimated in gold, but in Silver. Moreover the English Sovereign is not exactly 1.25 of a 20-franc gold piece. Accordingly 25.21 was usually considered as the Par of Exchange between England and France when Gold was fixed at the ratio of 1 to 15½ to Silver: which ratio is now only maintained by the French Mint being closed to the free coinage of Silver for the public

*There can be no Fixed Par of Exchange between Countries which use Different Metals as their Legal Standard*

3. There can only be a Real Par of Exchange between countries when they use the **Same Metal** as their **Legal Standard**.

There can be no fixed Par of Exchange between countries which use different Metals, such as Gold and Silver, for their Legal Standard. The relative Market Value of the two metals is constantly varying from causes entirely beyond the control of any Law. It has already been shown that the Value of the Coins when issued in unlimited quantities strictly follows the Market Value of the metals. It is no more possible to have a fixed price of one in terms of the other, than to have a fixed legal price of corn or meat or any other commodity. If there is to be a fixed price of one in terms of the other, the coin whose value is to be fixed must be strictly limited in quantity. Thus at the present time in France five-franc pieces are maintained at the ratio of  $15\frac{1}{2}$  to 1 to gold, because the French mints are closed to the free coinage of silver. If silver were coined in France in unlimited quantities, the value of the five-franc pieces would fall to the ratio of about 25 to 1 to gold. So in England the value of shillings is maintained by strictly limiting their quantity. The artificial value of shillings to gold is 20 to 1: but if shillings were freely coined their value would be about 38 or 40 to 1 to gold. So the Indian Government has recently closed its mints to the coinage of silver, to prevent the further fall in the value of the rupee. Every Government which uses gold as the Legal Standard and silver coins as subsidiary, allows gold to be coined in unlimited quantities, but restrains the issue of silver within its own discretion.

In 1797, when the Bank of England stopped payment, the House of Lords appointed a Committee to investigate the subject. The Committee, among other things, wished to ascertain the Par of Exchange between London and Hamburg, and they examined several merchants upon the question. But the merchants were quite unable to agree among themselves what the true Par of Exchange between the two places was: and the Committee reported that they were unable to come to a satisfactory conclusion on the point.

There cannot in the nature of things, be any true or fixed Par of Exchange between England and any country which uses a Silver Standard. It is only possible to say that such is the *usual Rate of Exchange* between them. Hence, when it is said

that 25·21 francs is the Par of Exchange between England and France, it only means that such was reckoned as the usual Rate of Exchange between them, before the recent great disturbance in the relative value of the two metals. And even the best authorities differed by several centimes. And between such countries it is sometimes impossible to decide certainly which way the Exchange is, unless the difference exceeds a certain amount

*On the Effects of a Depreciated Coinage on the Exchanges*

4. Coins may circulate in their own country at their full nominal value after they have lost a good deal of their legal weight by wear and tear, because persons in general are not very rigorous in weighing every Coin they receive

But when they are exchanged for Bullion, or for the Coins of a foreign country, they are always weighed and exchanged weight for weight. If, therefore, for any reason whatever, the English Coins have become degraded, worn, or clipped, and so lost their proper weight, they will evidently not buy so much Bullion or full-weighted francs, as if they were of their full weight

If English sovereigns were in this depreciated state they might perhaps only purchase 24 francs instead of 25·21 francs. This would be called a **Fall** in the Foreign Exchanges

Or if an English merchant were obliged to pay a Debt of 2,521 francs in Paris he would have to give *more* than £100 to purchase them. This would be called a **Rise** in the Foreign Exchanges: and the Exchange would be said to be so much **Against** England by the amount of the difference

When English Coin is used to purchase French Coin, it may be looked at in two points of view—

1. A Fixed amount of English Coin may be used to purchase an **Uncertain** amount of French Coin

2. An **Uncertain** amount of English Coin may be used to purchase a **Fixed** amount of French Coin

In the first point of view a **Fixed** amount of depreciated English Coin will buy a **Less** amount of French Coin

In the second point of view it will require a **Greater** amount of depreciated English Coin to purchase a **Fixed** amount of French Coin

*Hence when a Depreciated Coinage is said to produce a **Fall** in the Foreign Exchanges, it means that a **Fixed** amount of English Coin will purchase a **Less** amount of Foreign Coin*

*When a Depreciated Coinage is said to produce a **Rise** in the Foreign Exchanges, it means that it requires a **Greater** amount of English Coin to purchase a **Fixed** amount of Foreign Coin*

A clear understanding of these expressions will prevent any confusion arising, when they are used indiscriminately, as they often are, in discussions on the Exchanges. They are not contradictory, as they might appear to be: they only refer to two different methods of estimating the Coinage

It is evident that the adverse state of the Exchanges will continue so long as the Depreciation of the Coinage exists: and that a restoration of the Home Coinage to its proper state will at once rectify the Exchanges

It is also evident that a Depreciation of the Coinage by a Debasing of its Purity will produce exactly the same effects: because in all cases it is the quantity of pure metal which is regarded: and this is equally diminished by a degraded state of the Coinage, or by a Debasing of its purity

*If the Coinage is in a Depreciated State, to determine whether the **Exchange** is **Favorable**, at **Par**, or **Adverse***

**5.** When the English Coinage is at its full legal weight, £100 in sovereigns will purchase 2,521 French silver francs

Suppose that the Coinage became Depreciated, so that the Market Price of Bullion rises to £4 3s.

Then the Market Price of £100 of full weighted Coin is £106 11s. 7½d.

Suppose that the Exchange on Paris is 23·80: or that £100 of the current coin will purchase 2,380 francs: then £106 11s. 7½d. will purchase 2,636·63 francs

But as the Par at the Mint Price is 2,521 francs : it is evident that the Difference between 2,521 francs and 2,536·63 francs : or 15·63 francs : is the extent to which the Real Exchange is in favor of England

It is also easy to see how much the exchange is depressed. Because £100 ought to purchase 2,536·63 francs : whereas they will only purchase 2,380 francs. Consequently the Exchange is depressed by 206·63 francs : or the 100 sovereigns are deficient by that amount of their legal weight : and this will be found to tally with the Rise of their Market Price above their Mint Price

*Hence a Depreciated Coinage necessarily produces a Rise of the Market Price of Bullion above the Mint Price : and a Fall in the Foreign Exchanges below Par*

Because it will require a Greater amount of the Current Coin to buy a Fixed amount of Bullion : and a Fixed amount of the Current Coin will buy a Less amount of Foreign Coin

Thus a Rise in the Market Price of Bullion above the Mint Price : and a Fall of the Foreign Exchanges below Par : **Proves** and **Measures** the **Depreciation** of the English Coinage

Hence we have the following Rules—

1. *Find the Market Price of Bullion in London compared to the Mint Price*
2. *Multiply the Market Price so found by the Rate of Exchange*

Then the Exchange is Favorable, at Par, or Adverse : according as the result is Above, At, or Below Par

And the Depression of the Exchange, caused by the Depreciation of the Coinage, is the Difference between the Sum so expressed in the Mint and Market Prices, multiplied by the Rate of Exchange

In the excellent state in which our Coinage now is, the question of the Nominal Exchange is of little importance. But it is impossible to understand the history of the Currency without it : and it is essential with regard to all Foreign Countries which use an Inconvertible and Depreciated Paper Money

*On the Real or Commercial Exchange*

**6.** We have now to explain the mechanism of the **Real** or the **Commercial** Exchange

Suppose that A in London is Creditor to B, and Debtor to B<sup>1</sup> both in Edinburgh, in equal amounts

Then to settle these Debts it would be necessary for B in Edinburgh to send the money to A in London : and for A in London to send an equal amount of money to B<sup>1</sup> in Edinburgh. This would require two transmissions of money between London and Edinburgh at some expense

The business may be settled much more easily and cheaply if A in London sends to B<sup>1</sup> his Creditor in Edinburgh an Order for the money upon B his Debtor in Edinburgh. By this means both Debts are settled and discharged by B paying over to B<sup>1</sup> the money he owes to A. That is by the simple transfer of the money from B to B<sup>1</sup> in the same place ; instead of by two transmissions of money between London and Edinburgh. This order is termed a **Bill of Exchange** : and the operation is exactly similar to a person paying his Creditor by a Cheque on his banker, or the case of the passengers in the omnibus described above

Thus an "Exchange," or a Delegation, requires at least *three* parties and *two* Debts

*On an Exchange with Four Parties*

**7.** The above is the simplest form of an Exchange. But the course of trade gives rise to much more complicated transactions.

In the above case A fulfils two characters or *personæ* : he is Creditor to one party and Debtor to another in Edinburgh

But in the "Exchanges" it more usually happens that there are *four* parties

Suppose that A in London is Creditor to B in Edinburgh : and that B<sup>1</sup> in Edinburgh is Creditor to A<sup>1</sup> in London

Then to settle these Debts two transmissions of money between London and Edinburgh are necessary

But suppose that A<sup>1</sup> in London goes to A and pays him the money he owes to B<sup>1</sup> in Edinburgh : and buys from him the Debt

he has against B in Edinburgh. He then sends this order to his own Creditor B<sup>1</sup> in Edinburgh : then B<sup>1</sup> presents the order to B : and receives from him the money he owes to A<sup>1</sup>. By this means both these Debts are settled by a local transfer in London and in Edinburgh : and the expense of the transmissions of money between these places is saved

When the sum total of the Debts between London and Edinburgh are exactly equal, they may all be paid and discharged by means of these "Exchanges," Novations, or Delegations, or local transfers, without the aid of a single coin

The Exchanges are then said to be at **Par**

### *On the Time Par of Exchange*

8. Suppose, however, that the Debts between London and Edinburgh are not equal : and that Edinburgh has to send more money to London than it has to receive from London. Then the Demand for Bills is greater than the Supply

But as it is cheaper to send a Bill than the money : those who are bound to send Money will bid against each other for the Bills in the market, as for any other merchandise : and the Price of Bills will rise : or a **Premium** will have to be paid for a Bill on London

Thus when Bills are at a Premium on any place, it shows that the Exchanges at that place are adverse

London is the great centre of Commerce : it is the seat of Government, to which the revenue is remitted from all parts of the country. The great families from all parts of the country go to reside there : and their revenues must be remitted to them there. Hence there is always a much greater amount of Money seeking to flow to London from the country, than the contrary. Consequently the Demand for Bills on London in the country is always greater than the supply : and therefore Inland Bills on London are always at a Premium

This Premium is computed by **Time**. It is an essential part of the business of a banker to give these Bills. Within a comparatively recent time, a Bill on London at sight was charged 40 days' interest in Edinburgh. But since the introduction of

railways, this has been reduced to 4 days. If a person in Edinburgh wants a Bill at sight on London, he has to pay 1s. per cent : or four days' interest

This is termed the **Time Par** of Exchange between Edinburgh and London. There is a similar Premium or Time Par of Exchange between all other towns in the country and London. This is termed **Inland Exchange**

It appears from this that when in any place the Demand for Bills on any other place is greater than the Supply, and, therefore, when *Bills rise to a premium*, the Exchanges are **Adverse** to the first place : because it has more Money to pay than to receive

But when the Supply of Bills is greater than the Demand, the reverse takes place : *Bills fall to a Discount* : and the Exchange is *favorable* to the first place : because it has more Money to receive than to pay

It must be observed, however, that the interests of Buyers and Sellers of Bills are opposite : if the Exchange is unfavorable to the Buyers of Bills, or those who wish to send Money : it is equally favorable to the Sellers of Bills : or those who have to receive Money .

Buyers of Bills are also termed **Remitters** : and Sellers of Bills are also termed **Drawers**

### On Foreign Exchange

9. The principles of Foreign Exchange are exactly the same as those of Inland Exchange. But there is very considerably more complication in the details : because different nations use different Metals as their legal standard : and different Coinages

In Exchange between two foreign places and of different Moneys, the Money of one place is always taken as **Fixed** : and the Exchange is always reckoned in the **Variable** Quantity of the Money of the other place which is given for it

The former is termed the **Fixed, or Certain, Price** : and the latter the **Variable, or Uncertain, Price**

When any place is taken as the centre, if the Money of the



place is the **Fixed Price**, it is said to **Receive** the **Variable Price**

But when the Money of the place is the **Variable Price** it is said to **Give** the **Variable Price**

The Foreign Exchanges are enormously complicated, because every centre of Exchange **Receives** the Variable Price from some places: and **Gives** the Variable Price to others

Between London and Paris the £ is the **Fixed Price**: and the Exchange is reckoned in the variable amount of francs and centimes given for it

On the contrary, between London and Spain the Dollar is the **Fixed Price**: and the Exchange is reckoned in the variable number of Pence given for it

Thus London receives from Paris so many francs and centimes for the £1: on the contrary, London gives to Spain so many pence for the dollar

In the quotations of the Rates of Exchange it is usual to omit the **Fixed Price**: and to state only the Variable price: and then that sum is termed the **Rate** or **Course of Exchange**

London **Receives** the Variable Price from Amsterdam, Austria, Belgium, France, Germany, Italy, and Switzerland

London **Gives** the Variable Price to Calcutta, Gibraltar, Lisbon, New York, Rio Janeiro, St. Petersburg, and Spain

*On the Effects of the Exchanges being Favorable or Adverse to London*

**10.** As a General Rule, when the Exchanges are **Favorable** to London, Foreign Bills fall to a **Discount**, because London has more Money to receive than to pay

When the Exchanges are **Adverse** to London, Foreign Bills rise to a **Premium**, because London has more Money to pay than to receive

But in consequence of the **Opposite** modes of reckoning the Exchanges in London on different countries, the very same effects will have to be expressed in **Opposite** terms, according as London **Receives** or **Gives** the Variable Price

*Exchange between London and Places from which it Receives the Variable Price*

**11.** If the Exchange of London on Paris is favorable to London, and, therefore, the supply of Bills greater than the Demand, Bills fall to a Discount : and consequently the Rate of Exchange will rise above Par : that is £1 will purchase **More** francs and centimes than the Par

But if the Exchange is against London : the Demand for Bills is greater than the Supply : and Bills will rise to a Premium : and therefore £1 will purchase **Fewer** francs and centimes : and the Exchange will fall below par

And the same is true with respect to all other places from which London Receives the Variable price

*Exchange between London and Places to which London Gives the Variable Price*

**12.** But of course the contrary takes place between London and all Places to which it **Gives** the Variable price

Thus between London and Spain, when Exchange is favorable to London, she will give **Fewer** pence to purchase the Dollar : or the Exchange will fall *below* Par

If the Exchange between London and Spain is against London, Bills rise to a premium : and London must **Give** more pence to purchase the Dollar : or the Exchange will rise above Par

And the same is manifestly true with respect to all places to which London **Gives** the Variable price

Hence when the Rate of Exchange between London and any other Place varies from Par : in order to determine whether the Exchange is Favorable or Adverse : it is always necessary to consider whether London Gives the Variable price to, or Receives the Variable price from, that place

The general principle of course is always true : when the Exchange is favorable to London, Bills in London or other places fall to a Discount : when the Exchange is adverse to London, Bills on other places rise to a Premium : but as

London Gives the Variable prices to some places, and receives it from others, the same Real State of the Exchanges requires Opposite expressions in these Opposite cases. But it is exactly the same with every centre of Exchanges : they each Give the Variable price to some places, and Receive it from others. Hence the calculation of the Exchanges is a matter of the most extreme complexity : and requires no little of the genius of the calculating boy

*On the Limits of the Variations of the Exchanges*

**13.** When the Debts to be exchanged between any two places are equal, the Demand and Supply of Bills at each place is exactly equal : and the Exchanges are at Par : because there is no Money to be remitted from either side

But if one place has to send more money than it has to receive, the Demand for Bills will cause them to rise to a Premium

It is the duty of the Debtor to place the money on the spot where the Debt is due, at his own risk and expense. Consequently, as it is cheaper to send a Bill by post than to send the cash with all the expenses of freight and insurance to pay, he would rather give a little more than the nominal value of the Bill, in order to save the expense of sending the specie

But he will not give more than the cost of sending the specie : because if the price of the Bills were higher than that it would be cheaper to send the specie itself

Hence the cost of sending the specie is a **Superior Limit** to the variations of the Real Exchange

But the reverse case may also happen, the Supply of Bills in London on Paris may exceed the demand. In that case London has more money to receive than to pay. The Price of Bills will consequently fall below Par. But for the same reason, the cost of transmitting specie will be an **Inferior Limit**, below which the Price will not fall

Hence the Limits of the Variations of the Exchanges are confined to **Twice** the cost of sending Specie between the two places

The Limits of the Variations of the Exchanges between two places are termed **Specie Points**: because when the Rates of Exchange have a tendency to exceed them, Specie may be expected to flow in or out as the case may be

It must be observed, however, that these Limits of the Variations of the Exchanges only apply to Bills payable at once, and to considerable periods. During short periods, and for Bills which have some time to run, the fluctuations of the Exchange may, from a variety of causes, greatly exceed these Limits

### *On Inconvertible Paper Money*

**14.** The above considerations affect Coinages of Gold and Silver. But in modern times a new species of Money has come into use: and nearly every country has had recourse to it in times of public difficulty—and that is **Paper Money**

While Paper is convertible—*i.e.*, while the holder of it can compel the issuer to give Gold for it on demand—it is evident that it cannot circulate at a discount: because if it fell to a discount the holders would at once go and demand Gold for it

In quiet and ordinary times a Bank can keep in circulation several times the amount of the specie it is obliged to retain in Notes or Bank Credits. As has been shown, banking profits can only be made by creating and issuing Credit in excess of Specie. And as long as there is public confidence that the issues can redeem this Credit on demand, the Credit circulates and produces in all respects identically the same effects as an equal amount of Gold

But suppose that some great calamity happens, such as a fear of invasion, this confidence will vanish, and numerous persons would demand payment of their Credits in Gold

Under the circumstances, and with the enormous masses of Paper in circulation in modern times, every country in Europe has been obliged to suspend payments in cash: and to give an artificial value to the Paper by receiving it in payment of taxes, &c., at its nominal value in specie: and to make it legal tender

When this is done Paper Money becomes in all respects equivalent to a New Standard: just as much as Gold and Silver:

and its Value is affected by exactly the same principles as affect the Value of Gold and Silver

Under the old system of attempting to fix the value of Gold relatively to Silver, there was no power of convertibility of one metal into the other : similar to the convertibility of the Bank Note. If Silver fell to a discount as compared with Gold, no one could demand as a right to have his Silver exchanged for Gold. Consequently, the inevitable result of a considerable change in Quantity or the Demand for either metal was a change in their relative Value. In 1794 Gold rose to 84*s.*, if purchased with *Silver* Bullion : but if the Silver coin had been convertible into Gold, like a Bank Note, this difference could never have arisen : any more than a Bank Note convertible into Coin, can circulate at a discount as compared with Coin

Now Paper Money, when issued as a substantive Coinage, follows exactly the same rules. If only the usual Quantity of it be issued—*i.e.*, no greater Quantity than would have been issued if it were convertible into Gold—it will continue to circulate at its Par value. But if these issues be increased in quantity : and if the natural corrective of excessive issues be taken away, namely—Payment in cash on demand—exactly the same result follows as attends a greatly increased quantity of Silver : and it falls to a Discount

### Lord King's Law of Paper Money

15. When either of two Metals used as a Coinage becomes greatly increased in quantity, it becomes Diminished in Value as compared with the other : and if Gold and Silver, not being convertible, are compelled by Law to circulate at a fixed ratio : in virtue of Gresham's Law, the one which is underrated invariably disappears from circulation : it is either hoarded or it is exported to foreign countries : where it may exchange for its true value

When one metal diminishes in Value with respect to the other it is not *Depreciation* : because it has a general Value in the market of the world. But when Paper is used which has no general Value in the market of the world : but merely a local Value : and it becomes excessive, it cannot be exported : because

it has only a local, and not a general, Value. It falls to a discount as compared with Coin: or Coin is said to rise to a premium: and in this case it is **Depreciation**: because it professes to be equal in value to Coin: and it is not so

If it is attempted to maintain a fixed ratio between Paper Money and Coin after the Paper has fallen to a Discount: exactly the same result follows as takes place when Coin of inferior Value is attempted to be made to circulate at par with Coin of superior Value. The underrated Coin is all hoarded or exported: it entirely disappears from circulation, and nothing but Paper remains. As the quantity of Paper increases, it falls in Value: all Prices rise: the Foreign Exchanges fall: and all the Foreign Trade of the country is deranged

A few years after the Bank of England suspended Cash Payments in 1797, the Price of Bullion rose, and the Foreign Exchanges fell: deranging the whole course of the Foreign Trade. Some able writers, the most conspicuous of whom was Lord King, maintained that this was due to the Depreciation of the Bank Note. Strong interests contested this doctrine. The Bank contested it, because it found it profitable to issue as much Paper as possible: merchants contested it because they were afraid that their accommodation would be restricted. After a short time the value of the Bank Note improved, and the question slumbered

In 1809 the same phenomena recurred in a much more aggravated form: and gave rise to the appointment of the celebrated Bullion Committee. All the witnesses before this Committee, except one, maintained that it was not the Bank Note which had fallen, but Gold which had risen.

The Report, drawn up by Huskisson, Horner and Thornton, entirely disproved this assertion, and showed that the Rise of the Market Price of Gold and the Fall in the Foreign Exchanges, was entirely due to the Depreciation of the Bank Note from Excessive quantity: and it recommended a diminution of its Issues: so as to restore the value of the Bank Note

Resolutions in accordance with the Report were moved by Horner: it was proved that there were two prices in common use: a Paper Price and a Money Price: and that a £1 Bank

Note and 7s. were commonly given for a guinea. Nevertheless, under the influence of party passion, the House of Commons voted that, in public estimation, a guinea was equal to a £1 Bank Note and 1s. : or that  $27 = 21$ . Freed by this vote from all control, the Bank made more extravagant issues than ever: so that in 1815 the Bank Note was only worth 14s. 6d.

However, the doctrines of the Bullion Report gradually convinced the Mercantile world: and in 1819 they had scarcely an opponent

Lord King's Law of Paper Money is this—

*A Rise of the Paper, or Market, Price of Bullion above the Mint Price: and a Fall of the Foreign Exchange below the Limits of the Real Exchange: is the Proof and the Measure of the Depreciation of the Paper Money*

This principle is so universally admitted now: and is so perfectly evident: that there is no use in wasting more words to prove it

It shows that Paper Money must always be restrained within certain strict Limits to maintain a Par Value with Gold. But if this be duly done, a certain amount of Inconvertible Paper Money may circulate along with specie at Par

If the Bank of England had taken proper measures for controlling and limiting its Issues, its Notes might have circulated at Par with Gold

In 1797, when the Bank suspension Act was passed, the Banks in Edinburgh held a public meeting, attended by the authorities of the town, and gave notice that they should henceforth refuse to cash their Notes. This refusal was continued during the whole of the war. But from the judicious measures taken their Notes continued to circulate at Par with Bank of England paper.

In 1874 the Inconvertible Notes of the Bank of France circulated at Par with Coin: because they were carefully limited.

The doctrines of the Bullion Report lay down the principles by which all Credit and Paper Currency, whether Convertible or Inconvertible, must be regulated—namely, a strict attention to the Price of Bullion, and the State of the Foreign Exchanges

The demonstration of the Bullion Report was, in course of

time, universally accepted by the Banking and Mercantile world: the only difficulty left unsolved was the Practical Measures to be adopted to carry it into effect

However, after several unsuccessful attempts to discover the true method of giving effect to this doctrine, this problem has now been successfully solved: as will be shown further on: and thus the Theory of the Paper Currency is now complete

### *Effect of the Restoration of the Coinage on the Exchanges*

16. In the preceding remarks on the Nominal Exchange, it has been shown that the depreciation or degradation of the Coin in which the Exchanges are reckoned must necessarily derange all the Exchanges of the country: and that a Restoration of the Coin to its due legal state will be sufficient to rectify the Exchanges

But the state of any other portion of the Currency, or Circulating Medium, than the one in which the Exchanges are reckoned will not affect them

In the early part of the reign of William III. the Silver Coinage, in which the Exchanges were then reckoned, had fallen into a most disgraceful state from clipping and other causes. On collecting bags of coin from different parts of the country, it was found that their weight scarcely exceeded one-half of their legal weight. The Exchanges were entirely disordered, and the commerce of the country was thrown into utter confusion. In the beginning of 1696 the great work of the restoration of the Coinage was begun, and by July the new Coin began to be issued in considerable quantities, and the Exchanges were immediately rectified

Bank of England Notes at this period were at a heavy discount, because the Bank had suspended payments in cash: but that produced no effect on the Exchanges: because they were not reckoned in Bank Notes, but exclusively in the Silver Coin

### *On Exchange Operations*

17. Exchange operations consist in buying, selling, importing and exporting Bullion: termed "**Bullion** operations": and in buying and selling Bills: termed "**Banking** operations"



The object of our present remarks is to explain the general causes which produce these movements of Bullion which so sorely vex the Banking and Commercial world

Exchange operations of both sorts may be either direct or indirect: that is, they may take place directly between the two places: or the final operations may be effected through the medium of one or more intermediate countries

It has been shown that for Bills payable at sight—or Cheques as they are now usually called—the limits of the variations of the Exchanges cannot exceed twice the cost of transmitting Bullion, which are called the Specie points: because when they are reached, Bullion may be expected to flow in or out, as the case may be

When the Bills, however, have a considerable time, such as three months or more, to run before they are payable: causes may operate which may produce *temporary* fluctuations of the Exchanges considerably beyond these limits

These causes are chiefly—

1. The necessity that the holders of the Bills may have to realise them, even at a considerable sacrifice, to maintain their own position
2. The doubtful position of the acceptors, or the general discredit of the place they are drawn upon
3. The differing Values of the precious Metals which are the standard of Payment at each place
4. The respective Rates of Discount at each place " "

Now it may often be that from these combined causes it may be considerably more profitable to possess Bullion at one place than another. Exchange operators then export Bullion from one place to another for the sake of the profit. They **Create** Bills upon such a place: they draw Bills upon their correspondents: discount their Bills: and remit the proceeds to meet their Bills when due

It used to be the dogma of the Mercantile world that Bullion is only exported to liquidate a previous state of indebtedness: and consequently that an export of Bullion comes to a natural end when the indebtedness is discharged. But this is a most

grievous error. The sufficient difference in the profit of possessing Bullion at two places, causes exchange operators to **Fabricate** Bills for the express purpose of exporting Bullion, without there being any previous indebtedness: and of course this drain will not cease so long as this possibility of making profit exists. The only effectual way of annihilating this profit, and causing the drain of Bullion to cease, is by **Raising the Rate of Discount**

Between countries in which there are no restraints on trade, the Exchanges will never vary much except on some sudden emergency. But there are countries with which, owing to their prohibition laws, the Exchanges are permanently unfavorable: because they will take nothing but Bullion for their goods. Russia is one of these countries: and hence, if not modified by other circumstances, Bills upon Russia would always be at a premium. But here again the effect of trafficking steps in, which always has a tendency to equalise prices. The merchant who deals in Bills acts upon the same principles as the dealer in any other commodities: he buys them where they are cheapest, and sells them where they are dearest. Hence, he will try to buy up Russian Bills on other Exchanges, or Debt Markets, where they are cheaper, and sell them on the London Market where they are dearer

On the other hand, from the course of trade between England and Italy, the Debt which Italy owes to England is usually greater than the contrary: hence Italian Bills will usually be at a discount, or cheap in the London Debt Market. So the Bill merchant buys them up cheap here, and sends them to some other market—Paris for instance—where they may be at a premium

By these means the price of Bills is raised where they are cheapest, and lowered where they are dearest. The general result is to melt all the differences between separate countries into one general result: so that the Exchanges will not be favorable with some countries and adverse with others: but they will be generally favorable or adverse with all the rest of the world

#### *On the Arbitration of Exchange*

18. Supposing, however, that a merchant has to remit money to Paris, while the Exchange with Paris is unfavorable

to England, he may possibly discover a more advantageous way of remitting it than by buying a Bill on Paris directly. Thus, for instance, while Bills on Paris are at a premium in London : those in Hamburg might be at a discount : and Bills on Paris might be at a discount at Hamburg

So if the merchant buys a Bill on Hamburg, and sends it to his agent there, and directs him to purchase a Bill on Paris with the proceeds, he may be able to discharge his Debts in Paris at a less sum than he would have to pay for a Bill on Paris in London

This circuitous way of settling his Debt involves additional charges for brokerage, commission, postage, &c. : but the effect of it is still further to equalise the Exchanges between London and all other countries. This circuitous method is called the **Arbitration of Exchanges** : and the sum which is given to London for the ultimate price it realises in Paris is called its **Arbitrated Price**

When only three places are used in the operation it is called *Simple Arbitration* : when more than three are employed it is called *Compound Arbitration*. It is evident that the quicker and cheaper the communication between countries becomes the less room there will be for such operations, because the limits of the variation of the Real Exchanges, which are the margin which renders such operations possible, will constantly diminish.

The scale upon which these indirect operations of Exchange are carried on is immense. There is no Exchange between places to and from which remittances have not constantly to be made. Consequently, when such places trade, their accounts must be settled by means of Bills on some recognised centre. London is the banking centre of the world. From the enormous exports of England to all quarters of the globe, remittances have to be made to London from every part of the world. There is, therefore, a constant demand for bills upon London to discharge the Debts incurred for these commodities. Hence, although the exporters may send their goods to different countries : yet if they can draw upon London, their Bills will be sure to find some purchasers somewhere to be remitted to London. Hence Bills upon London

bear a higher price, and meet with a readier sale, than those upon any other places

One country, A, may import from another country, B, less than she exports : consequently a Debt is due from A to B. Also B exports to another country, C, more than she imports : consequently a Debt is due from C to B : and A may discharge its Debt to B by transferring to it its claim against C

As many countries trade with one another between which there is no Exchange, their claims are mutually adjusted by Bills upon London, the great banking centre. Hence the London Exchange is the most important in the world, and requires the greatest attention to be paid to it

### *On the Import and Export of Bullion*

**19.** We must now consider the causes which affect the Import and Export of Bullion

As the British Islands do not produce the precious metals to any extent worth considering, they are only to be obtained in this country by importation : and we must now consider the various sources from which they come, and the different causes which produce an influx or efflux of them. They are to be treated in every respect like any other foreign commodity, and are obtained by the same means as any other that we require for domestic consumption which is not a native product

The trade in Bullion may be divided into two distinct branches : the one where it is carried on directly with the countries in which Gold and Silver are native products : and the other with those countries which do not produce it : but which, like our own, have no means of supplying themselves with it except by foreign commerce

#### *I.—With Bullion-producing Countries*

Before the discoveries of Gold and Silver in California and Australia, the chief Bullion-producing countries were Mexico and Peru. There were others, it is true, but we need not specify them, because the same principle applies to them all : and to

describe them all would rather belong to a work on commerce generally

British merchants have establishments, or correspondents, in those countries, to whom they consign their goods: and their agents exchange them for Bullion brought down by the natives, and which is collected in large quantities: and in former times used to be brought home in ships of war for the sake of security.

In those countries Bullion is treated exactly like any other commodity, such as tea, wool, or wine: and the British goods of all kinds are exported to them for the express purpose of being exchanged for Bullion, to be remitted home. Such transactions are pure barter

The limits to this exportation are precisely similar to the limits of the exportation of any other commodities. It is clear that by the time the Bullion reaches this country, it ought to be sufficient to cover the original cost of the goods, and all charges on them on their way out, as well as the agent's commission there: the charges for freight, insurance and commission for bringing it home: and a mercantile profit over and above all these expenses. Unless it does that the commerce is not profitable. If too many goods are exported to these Bullion-producing countries their exchangeable relation with Bullion falls: and they will not purchase a sufficient quantity of Bullion to afford this profit: and the further export of goods to these places must cease until the goods first sent out are consumed: and fresh ones required at such a price as to afford a profit. The commerce in Bullion, then, with these countries is a very simple affair, and requires no further notice

## II.—*With Countries which do not produce Bullion*

The causes which cause an Influx or Efflux of Bullion between this and other countries which do not produce it are vastly more intricate and complicated, and have excited long and keen controversies

Taking this country as the centre, the transmission of Bullion to or from it is influenced by the **Seven** following causes—

1. The Balance of Payments to be made to, or by, it

2. The State of the Foreign Exchanges
3. The State of the Currency
4. By the Remittances made to this country as the Mercantile centre of the world, to meet payments due to other countries
5. By the Political and Mercantile Security of this and other countries
6. By the State of the Money Market : or the comparative Rates of Discount in this and neighboring countries
7. By\*the free or prohibitive Tariffs of this and other countries, as they permit or forbid our products to be imported into them

There are, then, **Seven** different causes which act upon the Exchanges, or the movements of Bullion at any given time : and as all these causes may be acting in all sorts of different ways, either in conjunction or in opposition to each other : it is evident that the Foreign Exchanges is one of the most complicated branches of human knowledge. The state of the Foreign Exchanges at any given instant is the **Resultant** of the operation of all these causes. The inveterate error of mercantile opinion for a long time was that there is only one cause of an export of Bullion—namely, a balance of mercantile indebtedness to be discharged.

### *On Commercial Operations*

**20.** For many centuries it was held that Money alone is Wealth : and it was considered as the true policy of every country to encourage by every means in its power the Import of Bullion and to discourage its Export. All European countries long prohibited the export of Bullion under dire penalties. The profit of Foreign Commerce was estimated solely by the quantity of Bullion it brought into the country : and the Theory of Commerce seemed to be reduced to a general scramble among all nations to try which could draw to itself most Gold and Silver from others

According to this Theory the gain of one party was the loss

of the other : every article produced in one country and imported into another was held to be a direct loss to the importing country. This was what was called the Mercantile System

According to this Theory the leading maxim which governed States was to make the Exports exceed the Imports : and the conclusion drawn was that the Difference, or Balance, must be paid for in cash by the debtor nation. When two nations traded with one another, the excess of the Exports above the Imports was called the "Balance of Trade." And the nation was supposed to gain the excess of the Exports above the Imports, and to lose the excess of the Imports above the Exports

This Theory having been believed in for centuries, and having been the cause of innumerable commercial wars, was seen to be fallacious about the end of the seventeenth or beginning of the eighteenth century, and finally exploded by the Economists

The admirable chapter of Adam Smith on the Mercantile System is a masterly exposure of the theory : and is one of the soundest and best written in his whole work, from the more than usual consistency of its ideas, and the lucidity of its style. Most persons whose knowledge of Economics does not extend beyond Smith, suppose that he was the first person to demonstrate its fallacy. This, however, is a complete error. Its fallacy was perceived and acknowledged three quarters of a century before his day, and was finally exploded by the Economists sixteen years before he ever published a line

So far from the principle of the Mercantile System being true, that Gold and Silver are the most profitable and desirable articles of Import, the direct reverse is unquestionably true, that Gold and Silver are of all objects of commerce the most unprofitable. It is a certain maxim of Commerce in a state of freedom that Bullion will not be imported until it has become unprofitable to import any other article. There is no class of traders who derive so little profit, in proportion to the Capital invested in their business, as dealers in Bullion and Money of all sorts, whether they be Bullion merchants or Bankers

*On the Balance of Trade*

21. There is no expression in commerce more common than the "Balance of Trade": and it may be as well to give the interpretation of it as generally received during the last century, and which is not yet wholly extinguished

Mr. Irving, Inspector General of Imports and Exports in 1797, defined it thus—"The common mode of considering that question has been to set off the Value of the Imports as stated in the public accounts against the value of the Exports: and the difference between the one and the other has been considered as measure of the increase or the decrease of the national profit"

And Mr. Hoare, a banker of eminence for twenty-two years, said—"I consider the only proper means of bringing Gold and Silver into this country to arise from the surplus of our Exports over our Imports: and that ratio or proportion which is not imported in Goods must be paid for in Bullion. In the year 1796 the imports of this country appeared to be £19,788,923, and the exports appear to be £33,454,583, which ought to have brought into this country Bullion to the amount of the difference, or £13,665,660" .

We have made these extracts because they convey in the fewest words possible the whole ideas on the subject, and they were made by persons of the highest commercial eminence before the Committee of the House of Commons. Mr. Irving said that to apply this principle to the whole trade of the country would be highly erroneous. We, therefore, do not cite him as approving the Theory, but only as distinctly stating what it was. But Mr. Hoare, a banker of long experience and eminence, adopted it. And we believe that this Theory of the Balance of Trade is still believed in by many persons. Nevertheless, there never existed a more complete chimæra and pernicious delusion than this said doctrine of the Balance of Trade, nor one which has exercised a more disastrous influence on commercial legislation

We will now take an example of the simplest description of trading to show the folly of the old doctrine of the Balance of



Trade, as that will illustrate the principle as well as the most elaborate

When our ships traded to the South Seas they took out with them axes, beads, and other trifles, which were very plentiful and of very little value in this country, and bartered them for all sorts of commodities or curiosities, shells, &c., which were very scarce and very valuable in England

A pair of fine shells from the South Seas in many cases is worth ten guineas in England, which an English sailor obtained, perhaps, in exchange for an axe worth 2/6. The English sailors thought the natives very simple to give away such valuable curiosities for such very common things as axes. The natives, doubtless, had the same opinion of the English sailors. They thought them very simple to give away such valuable things as axes, beads, &c., for such common things as a few shells

Each party, however, exchanged what was common and cheap in his own country for what was scarce and valuable. 'The axes were many times more valuable in Fiji than the shells: the shells were many times more valuable in London than the axes. Thus an English sailor, by giving away an axe which was perhaps worth 2/6, obtained a pair of shells which was worth ten guineas in London: and the difference was his profit. *Thus both parties gained by the exchange*, which was Adam Smith's great discovery. The shells were worth many axes in London: the axes were worth many shells in Fiji: and this is the genuine "spirit of commerce"

This simple transaction is a type of all commerce. 'The value of the shells in London arises from the strong desire of the people to possess them, and their scarcity: the value of the axes in Fiji arises from the strong desire of the people to possess them, and their scarcity. The colored beads were just as valuable to the untutored savages as precious stones to the civilised Europeans. The commerce of all nations is exactly the same in principle as that between the sailors and the savages. It all consists in exchanging what is common and cheap for what is scarce and valuable in the two countries respectively. And, of course, both parties must gain by the very nature of the transactions

But according to the old doctrine of the Balance of Trade, England having exported axes to the value of 2/6, and imported shells to the value of ten guineas, owed the balance which required to be paid in gold !

Thus the very reverse of the old doctrine of the Balance of Trade is true. So long as the goods imported are the payment of the goods exported, it is clear that the profit to England is exactly the value of the goods imported above that of the goods exported. But there are considerable deductions to be made from this. All the expenses of conveying the goods to the foreign country and of bringing the imports from the foreign country must be defrayed out of this difference : and in addition to that there must be the merchant's profit : so that it is evident that there must be a considerable excess of the value of the imports above the exports if the commerce is to be carried on at a profit.

But it would be a great mistake to suppose that all the goods imported are payment of the goods exported

The goods imported and entered at the Custom House form three different classes—

1. There are goods imported in payment of the goods exported

2. There are goods sent here for sale or speculation

3. There are goods sent here to be bonded, and re-exported to other countries

But as the Custom House returns do not and cannot discriminate between these classes of imports, it is evident that there exist no means of ascertaining the respective quantities of goods which belong to each class, and consequently it is absolutely impossible to determine whether the Exchanges are favorable or adverse from the mere Custom House returns

The Exchanges are, then, an inscrutable mystery even while confined to the Custom House returns. But at the present time they are rendered more inscrutable than ever, because a new article of Import and Export between countries has come into existence—namely, **Securities** of all sorts. Bills of Exchange,

Government Securities, and Securities of private Companies of all sorts, are now imported and exported between countries exactly like material merchandise, and they have exactly the same effect on the Exchanges as material commodities. If Bills of Exchange, Government or Private Securities are imported for discount or sale in this country, and the money taken away, they have exactly the same effect on the Exchanges as if an equal amount of commodities were imported for sale and the money taken away. But as all these Securities pass through the Post Office, and not through the Custom House, there is, of course, no possible means of ascertaining their amount

The Foreign Exchanges are, then, an inscrutable mystery so far as regards any returns which are procurable. And there is no possible means of unravelling it. They can only be judged of by their actual state at any time : *i.e.*, by the actual Demand for Specie, either for Export or Import, which may exist at any moment, which arises from causes which are absolutely impenetrable to any inquirer

### *Simple Examples of Commercial Operations*

**22.** We shall now give a few examples of simple commercial operations to illustrate general principles. To give a complete exposition of the Foreign Exchanges, one of the most complicated and obscure branches of human knowledge, would require a large treatise, and be incompatible with the limits of this work

Suppose that a merchant in London sends out £1,000 of goods to Bordeaux. By the time they arrive there the mere addition of freight and insurance and other charges will probably have increased their cost of production, or the cost of placing them in the market there, to £1,050, supposing them to be sold without any profit at all. But as the merchant would never have sent them to that market unless he expected to realise a good profit, we may suppose that they sell for £1,200

His correspondent at Bordeaux, instead of remitting the money to England, would find it more profitable to invest the proceeds of the goods in some native product which would fetch a good price in England. The chief native produce of that

country is *wine* ; so the agent, after deducting all charges, would invest the proceeds in wine, and send it to England in payment of the goods. If the markets were favorable, this wine might be sold for £1,500 in England : and after deducting all charges on the cargoes both ways, the difference would be the merchant's profit. In this case no specie would pass between the countries. The merchant would import more than he had expected : and his profits are the excess of the value of the inward cargo above that of the outward cargo, after deducting the charges both ways.

The merchant's agent at Bordeaux would have to consider the state of the market, both at Bordeaux and London, before he could determine whether he should send specie or wine in payment of the goods. Supposing that the goods are sold at a good profit at Bordeaux, he must consider the price of the wine, both at Bordeaux and in London. From various causes the price of the wine at Bordeaux might be very high, and the price of the wine in London very low : so that if he were to send wine, it might result in a loss. If there were no other suitable product than wine, he would have to remit specie : and then the exchange would be in favor of London. But before the merchant in London could reckon his profits, he would have to deduct the charges on the specie

Whether the transaction was profitable or not to the merchant would entirely depend on the amount of the specie he received for his goods after deducting all charges. If there was a scarcity of such goods at Bordeaux, he might realise good profits : but it would be highly improbable that he should realise as high profits on the single operation, as on the double one of exporting goods and importing wine. The import of the specie would therefore be less profitable to him, and to the nation at large, than the import of the wine

Hence we observe that specie is the least profitable article of import to a country : and it is never sent unless there are no commodities which can be imported with a profit

The reasons which caused the export of specie from Bordeaux were the scarcity and dearness of wine at Bordeaux, and its abundance and cheapness in London. Hence we gather that the scarcity and dearness of native products is the sure cause of the

export of specie from a country: and on the contrary an abundant supply of cheap products of all kinds, both native and foreign, will cause an importation of Specie

The Exchange being in favor of a country means nothing more than that, from whatever causes, Bullion has to be remitted to it. But the above example is as good as a thousand, to show the dangerous fallacy of drawing any conclusion as to the advantage of the trade to England, from the simple fact of the Exchange being favorable, and an influx of Specie taking place.

If Bordeaux had but one native product—wine—the chance of finding the markets both at Bordeaux and London favorable for importing produce instead of specie would be limited to that single article. But if it had other products the chances would be increased of finding articles to suit the respective markets: and the chances would evidently be multiplied according to the number and variety of its products. Hence we see the immense importance of making London the entrepôt for all the products of the world, so as to multiply the chances of being able to pay for our imports by exports of products rather than of specie

The example given above is of the simplest description, and a merchant of eminence who had correspondents in different parts of the world might easily multiply these operations so as to visit many markets before the final returns of his cargo were brought home. Thus, instead of having the wine sent home from Bordeaux, his correspondent might find it more profitable to send it to Buenos Aires, and dispose of it there. One chief native product there is hides: and we may suppose that his correspondent there might invest the proceeds of the wine in hides: which there might be a favorable opportunity of selling in the West Indies. When the cargo arrives in the West Indies, instead of remitting the proceeds directly home, it might happen that, owing to a scarcity of corn at home, it might be very high there and cheap in Canada. So he might invest the proceeds of the hides in sugar: despatch the sugar to Canada, where the merchant's correspondent there would dispose of it, and purchase corn, which he would send to England

In this case there have been five distinct operations: and as

there will probably be a profit upon each of them, by the time the ultimate return of the goods, which originally cost £1,000, are brought to England, it may be that the ultimate profit several times exceeds the original outlay: and no specie has been sent from one country to another in the whole course of the extended operations

We may now take New York as the starting place. The staple products of America are bread stuffs and provisions of all sorts. A merchant of New York sends a cargo of corn to Liverpool, and his correspondent there will endeavor to invest the proceeds of that in British goods, if he finds that the state of the markets in England and New York will make such an operation profitable. If the price of corn here is very high, and the price of goods is also very high here and lower in New York, it is clear that nothing but Specie will be sent. When a great and unexpected dearth of corn used to take place in England, and its price rose very high, which, however, can never happen again, the infallible result used to be to cause a great drain of Specie from this country, because our necessity for corn was much more pressing and immediate than their demand for goods. The only way to arrest such a drain of Specie is to effect such a reduction in the price of our goods as will make it profitable to export goods rather than Specie. It was one of the objects of the Bank Act of 1844, to enforce such a contraction of Credit at such times as would reduce the price of goods, so as to make it possible to send them instead of Specie

In the cases we have hitherto been considering, we have described the operations as if merchants were left perfectly free to carry the goods whither they pleased, and were not met and obstructed by artificial obstacles purposely devised for interfering with their business, by the laws of different nations. But all modern nations, and our own among the rest, have habitually discouraged the importation of foreign goods, and have imposed heavy duties for the specific purpose of excluding them, as they conceived the extraordinary idea that all foreign goods brought into a country are so much loss to it

Thus the Statute of William III., 1688, c. 24, says—"It hath been found by long experience that the importing of French commodities of all sorts have much exhausted the treasure of this nation, lessened the value of the native commodities and manufactures thereof, and greatly *impoverished* the English artificers and handicrafts, and caused great *detriment* to the kingdom in general"

If we consider the effect of these prohibitory laws in one place, it will equally apply to every other. Thus, suppose that there are high protecting duties at Bordeaux against British commodities: as the customer must ultimately pay all the expenses, charges, and duties on the goods, it will have the effect of greatly raising the market price there, and diminishing the number of persons who can afford to buy them: hence the market is contracted: a smaller quantity of goods will overstock it than if it were more extended. This will cause a less quantity of goods to be sent from England, and it will cause a larger proportion of specie to be remitted to pay for the products of Bordeaux

This example shows that the inevitable effect of high protecting duties between country and country is immensely to contract the exchanges which would naturally take place between them: and to cause a much more frequent transmission of specie from one to the other than would be the case in an unfettered state of commerce: unless indeed the smuggler sets in, who is the natural corrector of this commercial insanity

The effect, then, of prohibitive duties is to cause an influx of Specie: but it must not be supposed that this is a favorable sign, as it is certainly the least profitable import a merchant can receive for his goods. And there is this very marked difference between an influx of specie under the Protectionist system, and under a Free Trade system, that the former is accompanied by a great dearth of foreign commodities: but the latter is a sign of a great abundance of them: as specie is never imported when men are allowed to follow their own interests, until our markets are already so overstocked with commodities that it has ceased to be profitable to import more

The foregoing cases convey a simple general outline of the course of trade between countries: and we gather from them the following results respecting the influx or efflux of specie—

I. The cause of specie being imported is when the price of goods is so low in England and so high in foreign countries as to tempt foreigners to send here to buy goods: or to induce our merchants to export them to foreign countries

II. The cause of specie being exported from England is that there is some great and pressing demand for some commodity in this country, as formerly for corn in the failure of the harvest, or other food of the people, and other commodities are so scarce and dear that they cannot be exported with a profit: or that the commodity is wanted in such vast quantities, that foreigners cannot consume our goods, which we should prefer to send in payment for them, fast enough: so that specie must be sent: and the greater the difference in price the greater will be the drain of specie: or that other markets are already so overstocked with our goods, which are depressed below their usual market value there.

This is what is meant by overtrading: and from this we see that—*Overtrading is a sure Cause of a Drain of Specie from this country*

The failure of the cereal crops in this country used to be another sure cause of a drain of specie. But with all the countries in the world now ready to pour in supplies in the event of a deficient harvest, it may be taken as certain that corn will never again rise to a famine price in this country. The great Commercial Crisis of 1847 was caused by several years of overtrading and the failure of the potato crops in Ireland, and the cereal harvests in Great Britain. We shall have hereafter to examine the policy and the effects of the Bank Act of 1844 in meeting it

There are some countries from which we draw articles of prime necessity, but to which, from different circumstances, we do not remit goods in payment. Russia was the great source of our supply of hemp, tallow and flax: and we used to import these products to the value of about £12,000,000 yearly: but from her prohibitive tariff, we were unable to send over our products in payment of these goods to anything like a similar amount in



value. To such a country the difference must be remitted in specie, to the mutual loss of both parties : and unless there were other means of equalising the Exchanges, the Exchange with Russia would always be unfavorable

The chief export trade of Ireland to England was in articles of food—pigs, cattle, oats, butter, eggs. Great quantities of these came from Ireland, but as these were entirely devoted to pay the extravagant rents which the Irish landlords used to screw out of their unfortunate tenants, who had nothing over after they had paid their rents, they were unable to consume any English goods in Exchange for those they exported. In consequence of this, their value had to be remitted in specie : and thus the Exchange between England and Ireland used to be almost uniformly in favor of Ireland. If Ireland had been sufficiently wealthy to have consumed English goods instead of being paid in specie, it would have been far more advantageous for both parties, for English industry would have been promoted, and Ireland would have gained more valuable imports

These two examples illustrate what we have said before, that the frequent transmission of specie between countries which do not produce it, indicates a less profitable trade than the exchange of products

If, then, specie be coming in from a country, it shows that we have already got so many of their products that it will not pay to import any more : and if specie be going out to a country, it shows that we have already sent out so many goods to that country that it will not pay to send any more

Now suppose commerce to be in that desirable and healthy state in which no specie passes between non-bullion-producing countries, who could tell which way the Balance of Trade inclined? Each country would show a favorable balance, taking the imports and the exports at their market price in each country

Each country would show that their imports exceeded their exports : that is, each would show that they had gained by their commerce : for the very simple reason that the value of the imports in their own markets would be greater than the value of the exports : and unless it was so, it is manifest that trade could

not be carried on : because all the expenses and profits of trade are provided for by the difference between the value of the exports and the value of the imports. Hence, unless both parties gain by the transaction, commerce could not be carried on

The fundamental fallacy about the Balance of Trade was that the interests of individuals were opposed to that of the State. Legislatures seemed to think that every merchant had entered into a conspiracy to ruin the State, which he tried to carry into effect by becoming as prosperous himself as he could. They missed the obvious truism that the prosperity of the State is made up of the individuals composing it : and that every one is far keener in discerning what conduces to his own prosperity than the State can be : and that if private merchants found it to their advantage to import products rather than Specie, it could not be advantageous to the State to force trade in a contrary direction.

*On the Rate of Discount as affecting the Exchanges*

**23.** We have now to treat of a cause of the movements of Bullion, which has acquired an importance in modern times far exceeding what it ever did before : and that is a difference in the **Rate of Discount, or Interest,** between two countries

In former times, when the communication between countries was slow and expensive, and perhaps even insecure, before the days of railroads and steamers, a considerable difference might exist between the **Rates of Discount** in two places, without causing any movement of Bullion from one to the other

But that is not possible now. Communication between places is now so rapid and inexpensive that directly the Rate of Discount in two places differs by more than sufficient to defray the cost of sending Bullion from one place to the other, an immediate flow of Bullion takes place from where it is cheaper to where it is dearer

This is in exact accordance with the usual mercantile principle that operates in every other case : that if the difference in the price of any commodities in two markets is greater than the cost of sending it from one to the other, it will immediately be sent:

and this movement will continue as long as the difference in the price continues

Now let us take an extreme case to illustrate the principle. Suppose that the Rate of Discount in London was 2 per cent., and in Paris 10 per cent.

That would mean that a merchant could sell a Debt of £100 for £98 in London, and only for £92 in Paris. But the expense of sending Bullion from London to Paris is now scarcely  $\frac{1}{2}$  per cent.

The consequence would be that foreign merchants would send their bills over in shoals to London to be discounted: and they would take away the specie: thus the Exchanges would at once turn against the country

Not only that, but Bullion dealers would **Fabricate** bills for the express purpose of having them discounted, and exporting the specie

Bullion dealers trade in Bullion just as other merchants trade in goods: and if they see that they can buy gold in London at 2 per cent. and sell it in Paris for 10 per cent.: they, of course, will do so, and aggravate the drain of Bullion. And it is evident that this drain will not cease until the Price of Gold is so far equalised between the two places as to destroy this profit

Consequently, at the present day, it is the imperative duty of the Bank of England to keep a steady watch on the Rates of Discount in neighbouring countries, and to follow their variations so as to prevent its being profitable to export Bullion from this country

*On Foreign Loans, Securities, and Remittances as affecting the Exchanges*

**24.** Besides the state of national indebtedness arising out of commercial operations, other causes may affect the Exchanges.

Formerly, during foreign wars, England, being more abundant in money and material resources than in men, used to subsidise foreign powers to a considerable amount: and the method of transmitting such loans to the best advantage to the transmitting country was an operation of considerable nicety and delicacy. To

withdraw a very large amount of actual coin at any given time from a commercial country might produce the most disastrous consequences when so many engagements had to be met at a fixed date

The method of operating is simply an example of what we have so fully illustrated in preceding chapters, that the *Release of a Debt is in all cases equivalent to a Payment in Money*: or that —  $\times$  — = +  $\times$  +

Instead of transmitting vast amounts of Coin, the method always adopted in such cases is to purchase Bills of Exchange on the place of payment: and by operating on a number of different centres to prevent the disturbances which would arise from withdrawing too large an amount of Circulating Medium from any one place

In 1794 the English Government agreed to lend the Emperor of Germany £1,000,000: and the problem was to send the money from London to Vienna with as little disturbance as possible to the London money market

Mr. Boyd, who conducted the operation, says—"The remittance of so large a sum as £4,000,000 I considered as a matter of infinite difficulty and delicacy, so as to prevent its producing any remarkable effects on the course of Exchange

"It was necessary to vary the modes of remitting, and to make use of the various means for that purpose presented by all the different Exchanges of Europe. It was not necessary to remit Bills upon Hamburg only, because it frequently happened that it answered better to remit to Hamburg upon other places, such as Madrid, Cadiz, Leghorn, Lisbon, Genoa, &c., than to remit direct on Hamburg; and having constantly orders from Vienna with regard to the rates of the different remittances to be made, our attention was drawn to the accomplishment of these orders on the best possible terms. In fine, it was necessary to take Bullion, Bills direct upon Hamburg, and Bills upon other places, all into our means of remittance, without giving the decided preference to that mode which was the most favorable, because any one mode invariably adhered to would soon have exhausted and destroyed that mode: whereas by turning occasionally to all the modes, and

not sticking too long to any one particular mode, we had the good fortune to make upon the whole very favorable remittances”

McCulloch gives an example of a similar operation—“In 1804 Spain was bound to pay France a large subsidy, and in order to do this, three distinct methods presented themselves. First, to send dollars to Paris by land: second, to remit Bills of Exchange direct on Paris: thirdly, to authorise Paris to draw directly on Spain. The first of these methods was tried, but found too slow and expensive: and the second and third plans were considered likely to turn the Exchange against Spain. The following method by the indirect or circular Exchange was therefore adopted—

“A merchant or *banquier* at Paris was appointed to manage the operation, which was thus conducted. He chose London, Amsterdam, Hamburg, Cadiz, Madrid, and Paris as the principal hinges upon which the operation was to turn: and he engaged correspondents in each of those cities to support the circulation. Madrid and Cadiz were the places in Spain from whence remittances were to be made: and dollars were, of course, to be sent when they bore the highest price: for which Bills were to be procured on Paris, or any other place that might be deemed more advantageous. The principle being thus established, it only remained to regulate the extent of the operation, so as not to issue too much paper on Spain, and to give the circulation as much support as possible from real business. With this view London was chosen as a place to which the operation might be chiefly directed, as the price of dollars was then high in England, a circumstance which rendered the proportional Exchange advantageous to Spain.

“The business commenced at Paris, where the negotiation of drafts issued on Hamburg and Amsterdam served to answer the immediate demands of the State: and orders were transmitted to those places to draw for the reimbursement on London, Madrid, or Cadiz, according as the course of Exchange was most favorable. The proceedings were all conducted with judgment, and attended with complete success”

But the most gigantic operation of this nature which ever

took place, which dwarfs all similar ones into insignificance, and may be regarded as the classic model of such things, was the payment of the indemnity which unhappy France had to pay to Germany, in consequence of the war of 1870-71. A minute account of this operation was presented to the National Assembly by M. Léon Say, from which we take the following details, sufficient, we hope, to make a general outline of the operations intelligible

By the definitive treaty of peace between Germany and France, signed at Frankfort, May 10, 1871, France became bound to pay to Germany the sum of 5 milliards of francs—equal to about 200 millions sterling—at the following dates—500 millions thirty days after the restoration of order in Paris : 1,000 millions in the course of 1871 : 500 millions on May 1, 1872 : and 3,000 millions on March 2, 1874 : together with 5 per cent. interest on the last 3 milliards

Payment might be made in Gold or Silver, Notes of the Bank of England, Prussia, Holland, Belgium, or first-class Bills of Exchange

The thaler was valued at 3·75 francs : and the German florin at 2·15 francs

All Bills not domiciled (*i.e.*, made payable) in Germany were to be valued at their net proceeds after deducting all costs of collection

- The portion of the Eastern Railway of France, situated in Alsace, was accepted as part payment of the Debt to the amount of 325 millions : also 125 millions were accepted in Notes of the Bank of France : and the sum of 98,400 francs, which remained due to the City of Paris after payment of the indemnity exacted from her, were counted as payment on account of the debt of France

Besides the indemnity payable by France, the city of Paris had to pay an indemnity of 200 million of francs : 50 millions in specie : 50 millions in Notes of the Bank of France : 37½ millions in two month's Bills on Berlin, at the Exchange of 3·75 francs for the thaler : and 63 millions in Bills upon London at six and fifteen days' sight, at 25·20 francs for the £ sterling

The Bills upon London were bought at the Exchange of

35·3488 : and those on Berlin at the Exchange of 3·7325 : Paris therefore lost 44·88 cents. on each pound sterling : and gained 1·75 cent. on each thaler. The total cost of the indemnity was 1,965,240·30 francs : and after it was all settled there remained a balance of 98,400 francs in favor of Paris, which was carried to the account of the indemnity due from France

The total operation was divided into two parts : the payment of the first two milliards, and that of the remaining three

In order to put the Government in funds to effect the payment they negotiated a loan of 1,530 millions with the Bank of France : and created two public debts of 2,225,294,045, and of 3,498,744,639 francs

The Government being thus in funds, commenced its exchange operations, and the debt was finally liquidated in the following way—

By Compensations . . . . .	325,098,400	francs
By Bank Notes and German Money . . . . .	742,334,079	„
By Bills of Exchange . . . . .	4,248,326,374·26	„

To effect this stupendous operation, all the great Bankers in Europe were invited to assist : and in June, 1871, a London agency was opened to receive subscriptions and bills. Other agencies were opened at Brussels, Amsterdam, Berlin, Frankfort and Hamburg. In the first loan the £ was received at 25·30 : the thaler at 3·75 : the Frankfort florin at 7 florins for 4 thalers : the marc banco at 2 marcs for one thaler : and Belgian paper at par. In the second loan the £ was received at 25·43 : the thaler at 3·76 : the Frankfort florin at 2·11 $\frac{7}{8}$  : the marc banco at 1·18 $\frac{1}{8}$  for 1 thaler : and Belgian paper at par

The Exchange operations in London began in June, 1871, and lasted till September, 1873. The mean average of the whole was 25·4943

In the course of the operations the Treasury purchased 120,000 foreign bills, amounting to about 4 $\frac{1}{2}$  milliards. It opened subscriptions in foreign countries ; and received foreign bills in payment of the loan opened in Paris. The subscriptions to the first loan comprised 213 millions : and the subscriptions to the second loan comprised 389 millions in foreign bills

M. Léon Say then gives some details respecting the three classes above named, as *Compensations*: as *Bank Notes* and *German Money*: and as *Bills of Exchange*

These compensations included—

Notes of the Bank of France . . .	125,000,000	francs
German Notes and Money . . .	105,039,145	„
French Gold Money . . . . .	273,033,058	„
French Silver Money . . . . .	239,291,875	„

The German Bank Notes and Money were collected from the sums which the German armies had brought with them in the invasion

The third class, viz., *Bills of Exchange*, included German bills taken at their full value, 2,799,514,183·72 francs: and other foreign bills taken at their net proceeds after deducting all charges, 1,448,812,190·54 francs

M. Léon Say then gives some details of the commercial operations undertaken to support these gigantic payments: but he at once acknowledges that it is impossible to explain their complete theory, on account of a new article of merchandise which has only recently been introduced into commerce

“It is not possible to explain the operations of a portfolio which contains 120,000 bills of a value exceeding 4 milliards

“There were all sorts of bills, from less than a thousand francs to more than five millions: some mentioned the purchase of merchandise: others appeared to be only fabricated for the purpose: and destined themselves to be covered at maturity by bills which were to be created to pay real transactions

“Bank Credits, the paper circulating between head offices and branches, circular exchanges, payments for invoices, the remission of funds for the ultimate purchase of merchandise, the settlement of debts abroad to France under the form of coupons, shares, and commercial obligations, were in all these effects, making up the most gigantic portfolio which was ever brought together

“After all this, to give a detailed classification is an absolutely impossible task. One can do no more than determine the classes of the operation, and make some general remarks on these classes, and on the importance and meaning of the business effected on each of them



“ Fifty years ago there were no other international operations than merchandise and money: merchandise, gold and silver were the only subjects of export and import: the balance of commerce was settled in gold and silver. Everything which was bought from the foreigner was paid for in gold and silver, if not in merchandise

“ One might find, then, in the custom house *data* more or less exact, but at least real *data* of the course of business between two countries: but things have greatly changed within fifty years

“ There has appeared, especially within the last 25 years, in international commerce what may be called a **New Article of Export**: an article which in every country has acquired a greater importance than any other, and which has had the result of completely distorting the meaning of Custom House returns. *This New Article is Securities*: it is transmitting across the frontiers of different states the property of capital by representation: which is easy to transport: viz., these Capitals of the form of Bills of Exchange, Public Funds, Shares and Obligations of Railways and other Companies

“ To understand the real course of international business, it is necessary to know not only the imports and exports of merchandise, the imports and exports of specie, but also the *imports and exports of Securities*: and this last class, which is the most important, and which is the key to the two others: escapes all kinds of returns”—because these imports and exports are transmitted through the Post Office and not through the Custom House

This is exactly the doctrine we have been enforcing for so many years: and shows the profound error of those Economists who would exclude Incorporeal Property from the title of Wealth, and of those who write books on Economics, and who are either ignorant of, or ignore its existence: for in this great mercantile country, it is now the largest kind of Property of any: and forms an enormous article of export and import between countries

Of the whole French Indemnity 273 millions were paid in French gold coin: and 239 millions in silver coin: being

somewhat over 20 millions sterling : whereas  $4\frac{1}{2}$  milliards, or 160 millions sterling, were paid by Bills of Exchange : and 125 millions in notes of the Bank of France, about equal to 5 millions sterling : besides an unascertainable amount in German Notes. Thus little more than one-tenth of the indemnity was paid in actual specie : which shows that a much greater part is played in modern commerce by Paper than by Specie

In recent years it has been the custom for foreign Governments to raise loans in the English market. So also foreign Companies seek to raise capital in England. All these loans act upon the Exchanges. There are also the drafts of families who reside abroad : these drafts act upon the Exchanges exactly like any other drafts

### *On the India Council Bills*

**25.** Very extensive Exchange operations take place on account of the Government of India

India has to make very large and continuous payments in London on several accounts : such as the interest on the Public Debt payable in London : the military and civil pension list : the military charges for the transport of British troops to India, and military stores : civil stores of all sorts : the establishment of the India Office in London, and the Engineering College at Cooper's Hill •

To meet these charges, the Council of India in London draws every Wednesday a certain amount of Bills on the Governments of the different Presidencies •

About thirty years ago these Council Bills did not exceed about £3,000,000 a year : but since then they have greatly increased : at the present time they are little short of £20,000,000 a year

But the Indian Governments pay in Silver Rupees : it is therefore requisite to draw for such a sum in Rupees as shall produce the required amount in Gold in London

It is for this reason that the relative Value of Gold and Silver

is of such deep importance to the Government of India. Every penny that the Rupee falls in value costs India £1,000,000 sterling

The great importance of these Bills, however, is the effect they have on the Market Price of Silver: they have in fact exactly the same effect as an equal quantity of Silver raised from the mines: and in recent years they have been a very potent factor in causing the diminished value of Silver with respect to Gold

Selling Bills for Silver in the London market is in reality the same thing as selling Silver itself. Consequently, the more of these Bills which are pressed for sale: the more does it diminish the value of Silver

The Government Rupee which, since 1862, has replaced the old Company's Rupee of the same weight and fineness, is 180 grains: being 165 grains fine with 15 of alloy

The British shilling, coined at the rate of 66 to the pound weight of Silver Bullion, contains  $80\frac{8}{11}$  grains of fine silver: and the Florin contains  $161\frac{4}{11}$  grains of fine silver

When the price of British Standard Silver was 60*d.* per ounce, the Rupee was worth 1*s.* 10*s.* 2,973*d.*, or nearly 1*s.* 10*s.* 3*d.*

But ever since 1872-73, there has been a continuous fall in the value of Silver: so that in 1890 it was worth only 42½*d.* per ounce and the Rupee was worth only 1*s.* 4*s.*  $\frac{5}{16}$ *d.*

But the value of Silver has still continued to fall, so that at the present time Silver is only worth 28*d.* the ounce. This stupendous fall, threatening bankruptcy to the Indian Government, roused them at last to take measures to save themselves. They recorded their intention to restore the ancient gold standard of India, the abandonment of which in 1852, by Lord Dalhousie, was the greatest blunder ever committed by that great proconsul, and has been the cause of all the present troubles: and they have closed the Indian mints to the coinage of silver with the hope of maintaining the Rupee at 1*s.* 4*d.* This, however, they have not succeeded in doing, as the value of the Rupee is scarcely more than 1*s.*; and there is no security that it may not fall still lower.

*On Monetary and Political Convulsions as affecting the  
Exchanges*

**26.** As an immediate consequence of the preceding principles, it follows that a Monetary or Political convulsion in a country will turn the Exchanges in its favor, if such an event is not prevented by the issue of Inconvertible Paper Money. The reason is plain : any Monetary or Political convulsion is attended by a great destruction of **Credit**. That Credit, while it existed, performed the functions of Money : but as soon as it is destroyed, there is an intense demand for Money to fill the void. Money rises enormously in value. Multitudes of persons are obliged to sell their goods at a sacrifice. The consequence is that Money, having risen greatly in Value, both with respect to Goods and Debts, flows in from neighboring countries. Of this we may give a few examples

In 1797, the political circumstances of the case produced a severe crisis, which ended in the suspension of cash payments by the Bank of England. But the extreme tension in England turned the Exchanges in her favor

In 1800, there was a great commercial crisis in Hamburg. The rate of discount rose to 15 per cent. That immediately drained the Bullion from the Bank of England

In 1825, there was a great commercial crisis in England. For a considerable period, the Bank, by making extravagant issues at too low a rate of discount, and taking no measures to prevent the Bullion from ebbing away, had turned the Exchanges against the country. But no sooner did the panic take place in December, than the Exchanges immediately turn in its favor. Exactly the same thing happened in 1847. No sooner had the crisis fairly set in, than the Exchanges turned in favor of the country

In the French Revolution in 1793, and subsequent years, the Government issued enormous quantities of inconvertible Paper Money, which caused all Silver to disappear from circulation, and depressed the Exchanges almost to nothing, so that at last they ceased to be quoted. But in 1796 all the Assignats were suppressed in a day. Silver immediately reappeared in circulation, and the Exchanges turned in favor of the country

This has been observed so universally, and the reasons for it are so obvious, that it is needless to cite any more instances

### *On the Means of Correcting an Adverse Exchange*

**27.** It has now been shown upon what complicated causes the great movements of Bullion depend, which produce such important consequences. There are Three great Economic Quantities—**Products, Bullion, and Debts**—all seeking to be exchanged, all flowing from where they are cheaper to where they are dearer

But all this vast superstructure of **Credit**—this mighty mass of Merchandise, or Exchangeable Property—is based upon **Bullion**. Different methods of doing business require different quantities of Bullion : but however highly organised, perfect, and refined the system may be, we come at last to the basis of Bullion as its moderator and regulator. If, therefore, the Bullion be suffered to ebb away too rapidly, the whole superstructure is endangered : and then ensues one of those dreadful calamities—a Monetary Crisis

We have endeavored to explain the different causes which produce an Adverse Exchange : so that if one takes place the proper corrective may be applied. If it is caused by a Depreciated Currency, there is no cure but a restoration of the Currency to its proper state

When, however, it rises from a balance of indebtedness from commercial transactions, there are but two methods of correcting it—an **Export of Produce** or a **Rise in the Rate of Discount**

It used to be a favorite doctrine that an adverse exchange is in itself an inducement to export produce on account of the premium at which the Bills could be sold. What truth there is in this doctrine can only be known to those actually engaged in such operations : but, at best, it must be very insignificant. But a very much more certain means of producing an export of goods is a **Lowering of their Price**

This was one of the fundamental objects of the framers of the Bank Act of 1844. They truly observed that the price of goods had often been unduly inflated by the excessive creation of Credit : while Gold was rapidly flowing out of the country. Thus when the price of goods was kept too high here, they of course could

not be exported to countries where they were cheaper : and, consequently, nothing but gold would go. One object of the Act, was by causing a gradual and compulsory contraction of Credit as Bullion ebbed away, to lower the price of goods, and encourage an export of them

The reasoning of the framers of the Act was undoubtedly correct in that respect. The only question is whether they hit upon the right method of producing the effect they desired : and whether the same object may not be attained by another and a better method. This, however, is not the place to discuss fully the policy of that Act : because there are several other conflicting theories involved in it : which we cannot fully discuss until we come to explain the mechanism of the Act itself, and its operation during a Commercial Crisis

It is sufficient to state here that all the objects of that Act can be attained by paying proper attention to raise the Rate of Discount rapidly as Bullion flows out. If the Directors of the Bank had understood and acted upon this principle in former times, although there would necessarily, in the nature of things, have been Commercial Crises, there would never have been Monetary Panics, or any necessity for that Act. It was to the not understanding and acting upon this principle that all the Monetary Panics of the last three-quarters of a century have been due. It is true that we cannot blame them too much, as before 1833 interest by law was restricted to 5 per cent. : a rate wholly insufficient to check a great outflow of bullion : and for many years it was held to be a theological sin to charge more than 5 per cent.

It has been shown that a difference in the rate of Discount between two places exceeding the cost of sending Bullion from one to the other causes a flow of Bullion from one to the other. But as all the cost of sending Bullion both ways falls upon the operator, the difference will be greater than might appear at first sight. And if the Bills be at three months the profit realised will only be one-fourth of the apparent difference. Mr. Goschen says that there must be a difference of 2 per cent. between London and Paris before the operation of sending Gold to or from France for

the sake of the interest will pay. And between other Continental cities, of course, the difference may be much greater

But whatsoever the difference may be, the **Method** is absolutely certain. Directly the Rate of Discount is duly raised here, persons cease to export Bullion from this country : foreign bankers cease to send over their own bills for discount here to export Bullion : they increase their demand for English bills. And as the rate is raised the demand will increase until the price reaches the Specie point : and Gold flows in. And as the Rate rises more, the more powerful will be the attraction, until at last the necessary equilibrium is restored between **Bullion** and **Credit**

## CHAPTER XI

## ON THE NATURE OF THE FUNDS

1. The nature of the Funds has always been an inscrutable mystery to those persons who adhere to the exploded concept of Economics as the "Production, Distribution, and Consumption of Wealth"

If a person had £500,000, as it is termed, in the Funds, he would be acknowledged to be a "Wealthy" person. But when the Funds themselves are said to be Wealth, many persons are scandalised at the idea that Public Debts are Public Wealth

It is obvious that the Public Debts, or Public Credit, depends upon exactly the same principles as the Credit of private persons of which we have elaborately explained the principles and the mechanism in the preceding chapters. All the difficulties and perplexities of the subject proceed from not having thought out and settled the elementary Concepts of Economics, as has been done in all other established Sciences

Before, however, we proceed to the exposition of the subject, it will be expedient to clear away the errors with which it is infested .

**Error of Mill and others regarding the Nature of the Funds**

2. It is first of all necessary to point out a most serious and vital error which many persons hold regarding the Nature of the Funds

Thus Mill says<sup>1</sup>—"This leads to an important distinction in the meaning of the word Wealth as applied to the possessions of the individual, and to those of a nation, or of mankind. In the Wealth of mankind, nothing is included which does not of itself answer some purpose of use or pleasure (?). To an individual

<sup>1</sup> *Preliminary Remarks*



anything is Wealth which, though useless in itself, enables him to claim from others a part of their stock of things useful or pleasant

“Take, for instance, a mortgage of one thousand pounds on a landed estate. This is Wealth to the person to whom it brings a revenue, and who could perhaps sell it in the market for the full amount of the debt. But it is not Wealth to the country : if the engagement were annulled the country would be neither poorer nor richer. The mortgagee would have lost a thousand pounds, and the owner of the land would have gained it. • Speaking nationally, the mortgage was not itself Wealth, but merely gave A a claim to a portion of the wealth of B. It was wealth to A, and wealth which he could transfer to a third person : but what he so transferred was in fact a joint ownership, to the extent of a thousand pounds, in the land of which B was nominally the sole proprietor

“The position of the fundholders, or holders of the public debt, is similar. *They are mortgagees on the general Wealth of the country.* The cancelling of the debt would be no *destruction* of wealth, but a *transfer* of it : a wrongful abstraction of wealth from certain members of the community for the benefit of the Government or the taxpayers. *Funded property, therefore, cannot be counted as part of the national wealth.* This is not always borne in mind by the dealers in statistical calculations. For example, in the estimating of the gross incomes of the country founded on the proceeds of the Income Tax, incomes derived from the funds are not always excluded : though the taxpayers are assessed on their whole nominal income, without being permitted to deduct from it the portion levied from them in taxation to form the income of the fundholder. In the calculation, therefore, one portion of the general income of the country is counted twice over, and the aggregate amount made to appear greater than it is by about thirty millions. A country, however, may include in its wealth all stock held by its citizens in the funds of foreign countries, and other debts due to them from abroad. *But even this is only wealth to them by being a part ownership in wealth held by others.* It forms no part of the collective wealth of the human race. It is an element in the distribution, but not in the composition, of the general wealth ”

How does the distinction between public and private wealth in the above passage consist with Mill's general definition of wealth—that it is Anything which has Purchasing Power?

The fallacy that the Funds are similar to a mortgage appears conspicuously in another writer, Mr. Capps, who gained a prize of £200 put at the disposal of the Society of Arts, for the best essay on the mode of liquidating the National Debt

He says—"There are two antagonistic and conflicting fallacies respecting the National Debt which are very prevalent. The first is that funded property forms as much a portion of the wealth of the country, and is, therefore, to be reckoned among its assets, as lands, houses, or any other description of tangible property. The second, which is precisely the opposite of the former, is that the Debt is a subtraction or a deduction from the wealth of the country: that the country is so much the poorer for it. Neither the one nor the other is correct: for the truth is that the country, with the trifling exception which we shall hereafter name, is neither the richer nor the poorer for the existence of the debt, and that consequently, both the opinions we have mentioned as being prevalent are erroneous: which we shall now proceed to show

"With regard to the first, we have seen estimates made of the total wealth of the country in which, after the enumeration as a portion of the wealth of the nation of lands, houses, raw materials and manufactured products of all descriptions, there has been an item inserted of "Funded Property" which has been considered as of itself an actual property, separate from, and an addition to, all other wealth. Now the debt, or the funds, though a property to the parties who hold them, are not so to the nation as a whole: for they are only *a Mortgage upon the rest of the property of the country*: and by just so much as they are the property of the holders they are an incumbrance and a diminution of the value of the things so mortgaged or encumbered

"It is precisely a parallel case to the following—A is worth £10,000 in the shape of an estate of that value. B is worth £5,000 in money. A mortgages his estate to B for £5,000, and spends the money unproductively. [Why so? Suppose he spends the money in improving his estate?] Let now a valuation be

made of the property of A and B jointly, and we shall find that the amount of their united wealth is just the value of the estate and nothing more. The estate is worth £10,000, £5,000 of which belongs to B as mortgagee, and £5,000 is the value of the equity of redemption to A as mortgagor. The mortgage in no way adds to the value of the estate, and though it is a property to B as mortgagee, it is to the same extent a diminution to A of the value of the estate

“It is the same with the National Debt. *The whole country and its productions are mortgaged to the fundholders to the extent of about one-seventh of their value:* and though such funds form a property to the holders of them, they are only so in the character of a mortgage which reduces the value of the property mortgaged to its proprietor by just the amount of the mortgage. In taking, therefore, any account, or making any valuation of the total wealth of the country, funded property must not be put down as an item, unless you make a corresponding deduction, on the other hand, from the value of the property of which it forms a mortgage”

We have quoted these passages at somewhat wearisome length, in order that we may not be supposed to have misrepresented the writers. They contain a complete series of misconceptions and errors upon a subject of great importance, and which involves several of the fundamental concepts of Economics

### **Error of considering the Funds as a Mortgage on the Property of the country**

3. To consider the Funds as a Mortgage on the lands and property of the country as Mill, Mr. Capps, and hosts of other writers do, is a gross and palpable error which only arises from ignorance of the most elementary principles of Mercantile Law

A Mortgage is a formal deed conveying rights to certain property. When were the Fundholders ever put by a formal deed of conveyance into possession of the country and its products? Let us see the Act of Parliament which did so. Let this wonderful deed of conveyance be produced. Until it can be produced, it is clear that the Funds are not similar to a mortgage on the property of the country

As a matter of pure Jurisprudence the Funds and a Mortgage deed belong to two totally different classes of property

In English Law, when a person borrows money on mortgage, as it is termed, he actually sells the land to the mortgagee in exchange for the money : and the mortgage deed is a title to that specific land or other property, and to no other. The mortgagee becomes the actual legal owner of the land : but he is bound to re-sell, or re-convey, the land to the mortgagor upon his repaying the money. Hence a mortgage deed is not separate property from the land : it forms but one property with it. Just as Bills of Lading and Dock Warrants are titles to specific goods, and are one property with them. Mortgage Deeds, and Bills of Lading are *not Credit* : they are *Jura in re*

But the Funds are pure Rights of action against the State as a *Persona* : or Rights of action to demand from it a series of future payments in exchange for money which the Fundholders have lent or sold to the State. They are simply a Bill of Exchange payable by instalments for ever

When a merchant gives a Bill of Exchange in exchange for goods, it is not a right to any specific money : it is simply an abstract Right of action against his person : he merely engages that he shall be ready to pay the bill when it falls due : and therefore it is called a *Credit*

So when the State borrows money, and gives the Right to demand a series of future payments from it in Exchange, which are called the Funds, they are not the Rights to any specific lands, products or money : they are merely Rights against the State as a *Persona* in its corporate capacity : and they are intended to be paid out of its future income, just as a merchant pays his acceptances out of his future income. They are, therefore, termed *Public Credit*

To suppose that the Funds are a mortgage on the land and its products is as gross an error in Mercantile Law, as it is to suppose that when a merchant accepts a Bill of Exchange he thereby grants a mortgage on his lands or house

The Funds, like Bills of Exchange, are *Credit* : they both belong to that class of property termed *Jura in Personam*

Mill is also grossly in error when he says that the citizens of one country may include in their wealth the stocks held by them of foreign countries, and other debts due to them from abroad : but that it forms no part of the wealth of the collective wealth of the human race : *because it is only wealth to them as part ownership in wealth held by others*

This involves the very common, but gross, error that a Creditor has any Right, or Property, in the possessions of his debtor. But every Jurist in the world has pointed out that a Creditor has no Right, or Property, in the possessions of his debtor, as we have fully shown already. A debtor's property is absolutely his own : and all that the Creditor has is an abstract Right of action against his Person to compel him to exchange some of his property to buy up the Right of action against himself. The Right of action and the Debtor's property are, therefore, separate and distinct articles of property : and there is no joint ownership whatever. It is the very first thing which is inculcated on every student of Mercantile Law, that a Bill of Exchange is not the title to any specific money. And it is into this elementary blunder that Scholastic Economists, like Mill, Mr. Capps, Stanley Jevons, Roscher, Marshall, and many others, have fallen, which shows that they are ignorant of the rudimentary principles of Credit

### *On the Nature of a Chose-in-action*

4. The blunder committed by Mill, Mr. Capps, and many others in holding the Funds to be a Mortgage on the land and its products shows such gross ignorance of the elementary principles of Jurisprudence and Mercantile Law, and is so important as regards Economics, that it will be of advantage to explain it fully for the benefit of lay readers : and to set before them the nature of a **Chose-in-action**

Thus it is said<sup>1</sup>—"Thing in action is when a man hath cause or may bring an action for some duty due to him, as an action of Debt upon an Obligation, Annuity or Rent. . . And because

<sup>1</sup> *Termes de la Ley. Chose in action*

*they are things whereof a man is not possessed, but for recovery of them is driven to his action, they are called things in action "*

So also<sup>1</sup>—"We will proceed next to take a short view of the nature of property in *action* : which is where a man has not the enjoyment (either actual or constructive) of the thing in question, but merely a *right to recover it* by a suit or action at law : from whence the thing so recoverable is called a thing (or chose) *in action*. Thus money due on a bond is a *chose in action*, for a Right to claim the money vests whenever it comes payable : but there is *no possession* till recovered by course of law, unless payment be first voluntarily made "

So again<sup>2</sup>—"Chose-in-action is a thing Incorporeal, and only a **Right** : as an Annuity, Obligation for Debt . . . Chose in action may also be called chose in suspense, because it has no real existence or being, nor can properly be said to be in our possession "

We have already carefully pointed out<sup>3</sup> that Jurists of all nations include Abstract Rights of all sorts, and among them Rights of action or Debts, as Wealth, Goods, Chattels, Vendible Commodities, Merchandise

We have also shown that Pothier carefully warned his readers from supposing that a Creditor has any Property or Right in the possessions of his Debtor

We have already explained that in all transactions on Credit the absolute property in the thing "borrowed," or in reality sold, passes to the purchaser : and that the seller loses all property in the thing "lent" or sold : and that he acquires only an abstract personal Right to compel the "borrower" to make an equal payment at some future time : but no property in the possessions of his Debtor : but he may sell this Right of action to any one else, like any material chattel

All this notion, therefore, of a Creditor having joint ownership in the possessions of his Debtor, which was originated, as far as we are aware, by Mill and Mr. Capps, and followed up by

<sup>1</sup> *Stephen's Blackstone*, pt. II., ch. I.

<sup>2</sup> *Blount, Law Dict.*

<sup>3</sup> *Vol. I., Chap. I., § 10, 12, 13, 62. Chap. III., Prel. Rem.*

so many other Scholastic Economists, is a pure delusion arising from their own ignorance of law

Among several others I may cite Roscher, who has attacked me in his Political Economy on this ground: but any student of Mercantile Law would tell him that his attack is founded on ignorance of the rudimentary principles of Mercantile Law

Persons who commit such grotesque blunders are not qualified to write on Economics at all

*Are the Incomes of the Fundholders to be reckoned Separately  
in the General Income of the country?*

5. Mill then alleges that it is a statistical error to count the incomes of the fundholders as independent incomes in the general income of the country: as they are already paid by the taxpayers: and that to count them as separate incomes is to count the same sum twice over

Now if this doctrine is true—If it is a theoretical error of statisticians to count the incomes of the fundholders as separate incomes in the general income of the country: 'it is equally a practical error in the Chancellor of the Exchequer to charge the fundholders with Income Tax: for that is to tax incomes twice over: but by taxing them, it is very evident that he considers them as separate taxable incomes

Considering the reputation that Mill formerly enjoyed as an Economist, though it is now utterly exploded among all intelligent persons, it is somewhat surprising that this doctrine, which is so comfortable for the fundholders, never seems to have attracted their attention. If it is true, why do not the fundholders in a body memorialise the Chancellor of the Exchequer to exempt them from the Income Tax, on the plea that their incomes have already been taxed in the general income of the country? For if it is a statistical error to count the same sum twice over in the general income of the country, it is equally a practical error to tax the same income twice over

And if an obdurate Chancellor of the Exchequer turned a deaf ear to their memorial, why should they not take measures to have

the question tried in a Court of Law? And the Judges would very soon clarify the ideas of the memorialists on the nature of the Funds

The doctrine is no doubt somewhat specious, and requires investigation: but we shall find that in this case, as in so many others, Mill asserts a doctrine which hits a great many other cases besides the one he has in view

If the argument is true that the incomes of the fundholders must be excluded from the general income of the country because they are already paid by the taxpayers, it applies to a great many other cases: because many other incomes are paid out of the taxes of the country; and yet are charged with Income Tax

1. The **Crown**: the civil list of the Crown is paid out of the taxes of the country: therefore it is not a separate income: and therefore, according to Mill, the Sovereign should pay no Income Tax

2. The **Naval and Military forces**: the payment of all seamen and soldiers is paid out of the taxes of the country: therefore they are not separate incomes: therefore, according to Mill, they ought not to pay income Tax

3. The **Civil Service**: the whole of the Civil Service from the Prime Minister and Lord Chancellor down to the humblest policemen are paid out of the taxes and rates: therefore, their incomes are not separate incomes: and, therefore, according to Mill, they ought not to pay Income Tax

If Mill's argument is true the incomes of all these persons must be excluded from the catalogue of the national income, because they all stand on the same footing as the fundholders: they are all paid out of the taxes of the country: and for the same reason they ought not to pay Income Tax

Are believers in Mill prepared to accept these conclusions? If his argument is true, how can they escape from them?

But if Mill's argument is true, it must be applied to many other cases besides those of persons who receive continuous salaries paid out of the taxes of the country for rendering continuous services



Many persons do it a temporary service, and are paid out of the taxes of the country. If Mill's argument is true, the sums paid by the State for these services are not separate incomes from the general income : because they are paid out of the taxes of the country : and, according to Mill, they ought not to pay Income Tax

The Government frequently contracts with private firms to do work for the State : with shipbuilders to build ironclads : or guns : with contractors to supply clothing, arms, beef, pork, rum, and other stores of all sorts : also with private firms for building the public offices, barracks, &c.

All these contractors are paid out of the taxes of the country

If Mill's argument is true, the sums paid to these contractors ought not to be counted in their incomes : because they are paid out of the taxes of the country : and the contractors ought not to be charged Income Tax on their profits made out of these contracts

Are believers in Mill prepared to accept these conclusions ? If his argument is true, how can they escape from them ?

But if Mill's argument is true, it must be greatly extended : for many persons derive their income from those of other persons : and yet they both pay Income Tax

A great nobleman has an income perhaps of £100,000 a year : he keeps a French cook at a salary of, perhaps, £300 a year : a Scotch gardener at £250 a year : and a retinue of other domestics

Now it is evident that the incomes of all his employés and domestics come out of my lord's income : and yet they are each reckoned separately in the income of the country : and my lord pays Income Tax on his income : and each of his employés whose income is above the limit pays Income Tax on his income

In short, if Mill's argument is true, the salary of no person whatever who is in the employment or service of any other person, single or corporate, ought to be counted as a separate income : and he ought not to be taxed for it

Are believers in Mill prepared to accept these conclusions ? If his argument is true, how can they escape from them ?

*Every person's Income is paid out of the Income of someone else*

6. But to bring the matter to a conclusion it is easy to show that the income of every trade, business, and profession whatever is paid in succession out of the general income of the country

The doctrine thus stated abruptly may seem like a paradox. Nevertheless, a very slight explanation, with the assistance of the fundamental truths of modern Economics, will very soon unravel the paradox. And it is contained in the observation of Smith that the same pieces of money pay everyone's income in succession

It has been shown that one of the great advances in Economics made by Smith and Condillac was that in an exchange *both* sides gain

The proposition that we have stated, that every person's income comes out of the income of someone else, is the necessary consequence of Smith's observation that the same pieces of money pay everyone's income in succession, and that in an exchange both sides gain

Let us take a few examples—

It is obviously true of all professional men. Where do the incomes of lawyers and medical men come from? Evidently from the incomes of their clients and patients. Where do the incomes of actors and musical performers come from? Evidently from the incomes of their audiences. And the incomes of all these persons are justly reckoned separately in the general income of the country

Owners of land devote their labor and capital to produce corn and cattle and herds, because they know that the public want to be clothed and fed. And they make an income by so doing. And where does their income come from? Evidently from the incomes of the persons who want to be clothed and fed

Merchants bestow their labor and capital in importing foreign commodities into the country: and by so doing they make an income. And where does their income come from? Evidently from the incomes of the persons who want their commodities

Landholders, having earned an income by selling corn and

cattle, expend their income on their employés, or butchers, bakers, tailors, lawyers, doctors, and public amusements, and educating their children

Merchants, having earned an income by importing or exporting commodities, as the case may be, expend their income on their clerks and servants, educating their children : upon butchers, bakers, tailors, wine merchants, and places of public amusement.

Lawyers, doctors, engineers, actors, &c., having earned an income from their clients and patients, expend that income upon educating their children, upon butchers, bakers, tailors, &c., and public amusements

And this mechanism is true of all occupations and trades in succession. In fact the whole mechanism of society is a series of exchanges : and in all exchanges there is profit

Each party in the exchange earns an income, and he pays Income Tax on that

Contractors earn an income from private persons by doing them services : by building ships, houses, factories, &c. : and they pay an Income Tax on their profits. Contractors do the State services by building ships, guns, public offices, barracks, and in innumerable other ways : they earn an income by so doing, just in the same way as by doing a similar service to private persons : and therefore they pay Income Tax on their profits : equally in one case as in the other

If Mill's doctrine were true, a lawyer who earns an income by fees from private clients should pay Income Tax : but a judge who earns an income by performing judicial services to the State, and receives a salary for so doing out of the taxes, should pay no Income Tax

But no Chancellor of the Exchequer or Court of Law would listen to such an argument for a moment

Mill's argument, therefore, is entirely erroneous as applied to the fundholders, and all the preceding cases

The case where it does apply is where a father makes his son an allowance to keep him at college : in this case, the youth does nothing to earn an income : it is a pure gratuity : it comes out of his father's income, who receives no service in exchange for it :

such an allowance is no more to be reckoned as part of the income of the country than the sum spent by a father in maintaining his children at home is part of the income of the country

Suppose again a father has a son in the Guards, and finding his pay not sufficient to enable him to maintain himself suitably to his position in society, makes him an allowance. Then the pay he receives from the State is part of the income of the country, because it is earned in exchange for a service done : the allowance he receives from his father is not part of the income of the country : it is mere expenditure on the part of the father. Accordingly, the officer pays Income Tax on his pay given for services done to the State : but not on the allowance he receives from his father

So when a person makes an allowance to his poor relations, they pay no Income Tax on the sum so received in charity

So the sums received as salary by the employés of a great nobleman are part of the general income of the country : because they are given in exchange for services done : so of contractors for the public service, they receive remuneration for services done to the State : so the Judges and other officials, civil and military : they all receive salaries in exchange for services done to the State : all these are independent incomes, and therefore they are charged with Income Tax

So the fundholders receive an income in exchange for a service done to the State : and accordingly their income is part of the general income of the country, just as if they had lent their money to private persons : and therefore they are justly charged with Income Tax .

*Mill's reason for saying that the Funds are Not part of the*  
**National Wealth**

7. Mill says—"The cancelling of the debt would be no *destruction* of wealth, but a *transfer* of it, a wrongful transfer of it from certain members of the community for the profit of the Government, or of the taxpayers. Funded property, *therefore*, cannot be counted as part of the National Wealth"

This seems a most extraordinary conclusion. A *transfer* of

wealth is in no case that we can imagine, the *destruction* of it. But Mill says that *because* the transfer of it is not the *destruction* of it, *therefore* it is not to be counted as part of the national wealth

A highwayman knocks down a traveller and robs him of his watch and money : now this is only a wrongful transfer of the watch and money : it is not a *destruction* of them : *therefore*, according to Mill, the watch and the money form no part of the national wealth !

A servant robs his master : that is only a *transfer* of the thing stolen : it is not a *destruction* of it : *therefore* according to Mill, the thing stolen forms no part of the national wealth !

We wonder what kind of syllogism leads to such a conclusion ?

There is no doubt a considerable degree of subtlety about the question, but most assuredly Mill's argument throws no light upon it

### *On the true Nature of the Funds*

**8.** Having now cleared away all these errors and misconceptions, we shall now explain the true Nature of the **Funds**

It has been shown by Demosthenes, Mill, and many other writers, that Personal Credit is Wealth—because it is Purchasing Power : and that the Credit of our Bankers and Merchants is National Wealth

It has also been shown that the State in its corporate capacity is a **Persona**, quite independent of its individual citizens. That it can buy and sell and exchange in that capacity exactly like a private person : and that with its own citizens as well as with any one else : just as a public company can deal with its own shareholders

It has also been shown that an Annuity is an Economic Quantity quite separate and independent of the sums of money actually paid : and that it can be bought and sold quite independently of them just like any material chattel

It has also been shown that every sum of Money is equivalent to an Annuity, either perpetual or limited : consequently that an

Annuity may be sold for Money : *i.e.*, that they are each exchangeable quantities : and may be exchanged like any material chattels

Moreover, the State has an income like any private person

This being so, the State, in its corporate capacity, has **Purchasing Power**, like any private individual : and it may buy a sum of Money by granting an Annuity in exchange for it : or the Right to receive a series of payments either perpetual, or for a limited time, to be paid out of its future income

That is to say the **Credit** of the State, just like the Credit of a private person, brings into Commerce the **Present Value**, or the **Present Right**, to its future Income

Now the State, in its corporate capacity, has to perform certain duties, and is often in want of a considerable sum of money for an emergency, as a war : or to provide against a public famine : or to create some great public work, such as a Railroad or a Canal : or to build ironclads

In order to effect these purposes it buys a present sum of Money, and gives in exchange for it an Annuity : or the Right to receive a series of payments out of its future income. The Money becomes the absolute property of the State : and the Annuity becomes the property of the subscribers to the Loan

In legal language, this Annuity is termed a **Bank Annuity** : because, as we have shown, the original meaning of the word **Banco**, or Bank, is a **Public Debt**. In former times it was also called a **Rent** : but this name has quite gone out of use in England, though it is still the usual name for the Funds on the Continent

In granting these Perpetual Annuities, the State never binds itself to pay off the principal : hence, in popular language, they are called the Funds : because the capital sum is *founded*, or fixed. The State, however, reserves to itself the right to pay off the Annuities if it pleases to do so. If the fundholder wishes to get back his capital, he can sell his Annuity to anyone else. If the Government wishes to pay off these Annuities it buys them in the open market, like a private person. The Funds are, therefore, marketable or vendible commodities, just like any material chattels

The Funds are, therefore, Property of exactly the same nature as the shares in a public company. The individual shareholders pay over their money to the company as a **Persona** : and receive in exchange for it the Right to share in the future profits of the company. The Funds are, therefore, simply a mass of Exchangeable Property, similar to Bills of Exchange, Annuities, Shares in Public Companies, and all other Incorporeal Property

Thus **Public**, like private, **Credit** is simply the **Present Rights** to **Future Payments**

*On the Ratio of the Public Debt to the Wealth of the Country*

9. We shall now observe the evil consequences in Economics of the want of clear fundamental Concepts

Mr. Capps values the **Wealth** of the country at £6,000,000,000 : and he says that the National Debt is about one-seventh of the **Wealth** of the country

But what does Mr. Capps mean by the **Wealth** of the country ?

Even taking the **Wealth** of the country as its *material* property only, such an estimate is manifestly utterly inadequate. Taking a very moderate estimate of the value of the land upon which London is built, it will be found that it exceeds £4,000,000,000 : and when to this is added the value of the land upon which other great cities, such as Birmingham, Manchester, Liverpool, Leeds, Glasgow, Edinburgh, Bristol, Aberdeen, Dundee, and hosts of others are built, it will be found that the value of these lands alone exceeds many times the value of what Mr. Capps estimates as the **Wealth** of the whole country. Indeed, as far as we can make out, Mr. Capps seems to exclude the whole of the land from the **Wealth** of the country

Besides, the author of the *Eryxias*, Smith, Say, Mill, and every Economist of note since, have all classed the natural and acquired industrial faculties of the members of the Society as part of the **Wealth** of the country. Are all these included in Mr. Capps's estimate of the wealth of the country ?

Moreover, Demosthenes, Adam Smith, Say, Mill, and every Economist of note since, all class the **Personal Credit** of all the

bankers, merchants, traders, corporations of all kinds, and the Credit of the State itself, as National Wealth. Is all this included in Mr. Capps's estimate of the Wealth of the country?

In addition to this, there is that gigantic mass of Property termed Incorporeal Property, including Mercantile and Banking Credits of all kinds: Shares in Commercial Companies of all kinds, the goodwill of all the places of business of all kinds; the practices of professions: copyrights: patents: and many other kinds of valuable Rights. On looking at Wettenhall's list it will be seen that the Property dealt with on the Stock Exchange exceeds £8,000,000,000: more than Mr. Capps estimates as the Wealth of the whole country!

Moreover, how can Mr. Capps estimate the value of all the Property in the households of private persons, the value of all the goods in the warehouses and shops of traders?

It is manifest that all estimates of the "Wealth" of the country are mere delusions and snares: and of no service for any scientific purpose. It is probable that the real Wealth of the country in its widest estimate would exceed Mr. Capps's estimate one hundredfold

As a matter of fact, the Funds are not a mortgage upon the land and material products of the country, as Mill, Mr. Capps, and so many others allege: they are a charge upon the **Income** of the nation. The interest of the Debt is not a charge upon those persons only who have an income from material property: but also a charge upon persons whose income is derived from industry of all sorts. The industry of all the professions, and of all intellectual capital, is just as much pledged for the payment of the dividends as the incomes of those who have real estate

The Funds are an Annuity payable out of the income of the entire nation: and, consequently, their weight upon the Public Wealth is the Ratio of this Annuity to the General Income of the nation

Some persons propose that the Debt should be discharged by compelling everyone who is possessed of property to give up so much of it. But how are we to compel those persons whose property consists only in their intellectual abilities to give up a part



of it? It is possible to confiscate material property. If a man has a thousand acres of land or ten thousand pounds, the State may take away one hundred acres of his land, or a thousand pounds of his money. But how is the State to confiscate one-tenth of his intellectual capital? A great advocate, physician, engineer, or other professional man makes an income of £10,000 a year. While he does so his talents are as much capital to him as an estate in land which produces £10,000 a year to its owner. But how is the State to get possession of a tenth part of a professional man's intellectual capital? Is it to take an axe and chop off a bit of his head? It is clear that there is no method of taxing intellectual capital but by taxing its **Profits**, or its **Income**. And the industrial income of every advocate, physician, engineer, and of every artisan is as much pledged for the payment of the Funds as the income of men of real estate

It is probable that the Ratio of the Funds to the Wealth of the country instead being 1 to 7 is less than 1 to 100

### *Are the Funds Wealth?*

**10.** Are then the Funds Wealth? This, of course, obviously depends on the meaning of the word **Wealth**. When it is once agreed that, as the ancients unanimously held for 1,300 years and, all modern Economists have now come to agree to, that the word **Wealth** simply means any **Exchangeable Property**—anything whatever which can be bought and sold—whatever its nature or its form may be: it is at once seen that the Funds are **Wealth**—because they are a mass of **Exchangeable Property**, and they are bought and sold separately and independently of anything else: just as so much corn or timber, or gold and silver

So Byles speaks of the Funds as being property only second to the land in magnitude. Say, at the very commencement of his work, expressly classes the Funds as **Wealth**. And every Jurist in the world knows that the Funds are a mass of **Exchangeable Property**

Mill, indeed, allows that the Funds are **Wealth** to the owners of them: but he says that they are not **National Wealth**. Now when we say that the word **Wealth** means any **Exchangeable Property**: **National Wealth** can only mean that property which

belongs to the nation in its corporate capacity, such as public lands, public forests, dockyards, the navy, &c., things which do not belong to any private individual. Individual property is not National Wealth. My money belongs to me and not to the nation

When some persons are horrified at the idea of Debts being termed Wealth, they are ignorant that the word Debt has two meanings—that it means both the Creditor's **Right of Action** and the Debtor's **Duty to Pay**

Now no one says that person's Duty to pay is part of his Wealth : but every one admits that the Creditor's Right of action is part of his Wealth

The Debtor's Wealth is his **Credit**, or his power of purchasing by giving a promise to pay in future instead of with actual ready money

Similarly the Wealth of a State is its **Credit** : or its Power of purchasing Money by giving in exchange for it an Annuity, or the Right to demand a series of future payments from it

If we revert to the original Concept of Economics by the Economists it will probably tend to clear away any difficulty that there may be in the case

The Economists admitted no material products to be Wealth except those which were brought into commerce : those which were not brought into commerce were not Wealth

The same doctrine applies to Labor and Credit now that these are admitted to be Economic Quantities

A man may have all the industrial faculties possible : but until he uses them for profit they are not Wealth : directly he uses them so as to earn an income they become Wealth

So a merchant or a trader's Credit, so long as he refrains from putting it into action, is not Wealth : but directly he utilises it by making purchases with it : it becomes Wealth

Now when a merchant utilises his Credit by making purchases with it, he brings into commerce the Present Rights to future profits. This augments the mass of Exchangeable Quantities in commerce : and by the doctrines of the Economists augments the mass of Wealth

Similarly the Wealth of the State is its **Credit** : or its Purchasing Power : and when the State exercises its Purchasing Power by purchasing money by issuing Rights to demand payments out of its future income, it does exactly as the private merchant does, it brings into commerce the Present Rights or Present Value of its future income : and thus augments the mass of Exchangeable Quantities, or Wealth

The case is exactly analogous to a gold mine before the Gold is extracted from the mine, and coined, and brought into commerce

It is usual for popular writers to speak of the mineral Wealth of a country ; its Gold mines, its coal mines, and other mines

But, as a technical term in Economics, the Economists unanimously held that a thing is not "Wealth" until the Gold is extracted, coined, and brought into commerce : and extracting Gold from the mine, coining it, and bringing it into commerce augments the mass of Exchangeable Quantities in circulation : and therefore augments what, in the technical language of Economics, is termed Wealth

Gold in the mines is in Economics a **Resource** : but it is not "Wealth" until it is brought into commerce

Now Personal and State Credit are Purchasing Power : and while they are unused they are like Gold in the Mine : they are a **Resource**

But when Persons and the State utilise their Credit by making purchases with it : it is exactly analogous to extracting Gold from the mine, coining it, and bringing it into commerce

When Persons and the State utilise their Credit by making purchases with it, they **Coin** their **Credit** : and just as extracting Gold from the mine, coining it, and bringing it into commerce augments the mass of Exchangeable Quantities : so when Persons and the State coin their Credit : it augments the mass of Exchangeable Quantities, or Wealth. It brings into commerce the Present Values of their Future Income : and this Credit, coined and brought into commerce, has in every respect identical effects with an equal quantity of Gold

Thus, the function of Credit, both Personal and Public, is

simply to bring into commerce the Present Values of Future Profits : and that obviously increases the mass of Exchangeable Quantities, or Wealth

The Public Debts are also called the Public Credit

We now see the confusion of Mill's distinction between the Wealth of mankind and the Wealth of an individual. He says that in the Wealth of mankind nothing is included which does not of itself answer some purpose of use or pleasure : that to an individual anything is Wealth which enables him to claim from others a part of their stock of things

But how can the Wealth of mankind be different in its nature from the Wealth of individuals ? For the Wealth of mankind is simply the aggregate of the Wealth of Individuals

It is evident that in the one case Mill makes Wealth depend upon **Utility** : and in the other case upon **Exchangeability** : the very confusion he falls into in his first chapter : and which pervades almost all modern treatises on Economics : and which the Economists emphatically warned their readers against

But as the ancients held for 1,300 years, Exchangeability is the sole essence and principle of Wealth : and pure, or Analytical, Economics is simply the Science which treats of the Laws which govern the phenomena relating to Exchangeability

A few examples will show how the utilisation of Credit augments the Wealth of a country—

When a Company undertakes to construct a public work, a railroad, a dock, a canal, or any other, it buys money from its shareholders : and in exchange for the money it gives them certificates entitling them to share in the future profits of the company. Thus the Company, as a *Persona*, in its corporate capacity, utilises its Credit by buying money from its own shareholders. It makes the railroad, canal, or dock, which produces a permanent revenue : and in consequence of this revenue the Shares become a valuable marketable commodity : and are, therefore, **Wealth**

So when a Bank is formed, it buys money from its shareholders and gives, in exchange for it, Rights to share in the future

profits of the Bank. The Bank then buys Money and Bills of Exchange by selling its Credit, or Rights of action, instead of actual money: and some Banks make enormous profits by so doing: and the Shares or Rights to share in the future profits of the Bank become extremely valuable commodities, or Wealth

Now all these great mercantile establishments, producing the revenues of principalities, are just as much Wealth as the land of the country: because they produce utilities which are wanted, demanded, and paid for. They are all created by means of Credit

And yet there is not one word about them in the common books on Economics

In some countries, and in some of our colonies, it is considered the duty of the State to execute these great public works: because there are not a sufficient number of private persons with the requisite capital to do so. But the State has no money at its command to execute them. It must, therefore, utilise its Credit. It contracts public loans to obtain the money: giving in exchange for the money Rights to demand future payments expected to be made out of the future profits of the works: but at all events for which the State is liable

Now these public works being executed by the State, and being the property of the State, are Public Wealth: and they are executed by the State utilising its Credit. Hence we see that Public Loans have augmented the Public Wealth

Again, suppose that a country is subject to inundations by the sea: and that to preserve the lives and property of the inhabitants it is absolutely necessary to erect vast sea dykes. Now as these sea dykes are absolutely necessary for the safety of the people, all the inhabitants must contribute to their formation and maintenance

The State, then, being compelled to execute these works without delay, utilises its Credit, and buys large sums of money by giving in exchange for them Rights to demand future payments out of the revenues of the country

Holland is such a country as we have described. It draws 20 feet of water: and these sea dykes are necessary for its existence

Now are the sea dykes part of the Wealth of Holland? Under the peculiar circumstances of the case they are wanted: they are useful: they are the product of "land and labor": they cost immense sums of money. Taking the very narrowest view of Wealth that any Economist has taken, they answer all the conditions of Wealth

It is clear that they stand in exactly the same position as railroads, docks, canals, &c.: and a vast quantity of the other Fixed Capital of the country. The people continually want them: in fact they could not exist without them: and they pay a portion of their annual income to the persons who advanced the money to make them. That forms the income of the persons who lent the money: and it is justly reckoned as a separate item in the catalogue of the general income of the country

Most persons would admit the correctness of the preceding examples. But when we come to the Public Funds, which are so many Debts just like the preceding cases, a good many persons are inclined to say—We have spent many millions of money, and what have we got for it? In the preceding cases we have got a tangible material revenue-producing substance in exchange for the money. But what have we got in exchange for the hundreds of millions of the Public Debts under which we are groaning?

Let us consider

Suppose a person has spent his money on his amusements—hearing our famous *prime donne* sing: or in theatrical entertainments: or in oratorios: or on food, and many other things. When the money is spent and gone it leaves no tangible material result behind. But has it been lost? Has the spender received no gratification, or satisfaction, for his expenditure? Undoubtedly he has: he considered these gratifications as the equivalent for the money, although they left no tangible result

The country may have other wants besides the ones enumerated. It may have enemies by sea and land: and it may be necessary to raise fleets and armies to defend its existence: just as the sea dykes defend the existence of Holland. It may be necessary to contract large public loans for this purpose. The

State utilised its Credit by buying large sums of money from private persons, and giving in exchange for them Rights to demand payments out of the future income of the nation. The persons who sell their money to the State for this purpose do it a service equally as those who sold their money to the State of Holland to erect sea dykes

What Holland gained in exchange for the money she spent on her sea dykes is simply her existence

So what England has gained in exchange for her Public Debts is simply her greatness and existence as a nation. By the Public Debts contracted in the reigns of William III. and Anne, she was enabled to prevent all Europe being enslaved by Louis XIV. By the Public Debt contracted by Pitt she acquired Canada and other transmarine possessions. By the Public Debts contracted during the wars with Napoleon, she saved her existence from being trod under the heel of that mighty conqueror, and purchased her position as the most powerful state in Europe in 1815. By the sums spent on maintaining the navy she has purchased her sea power, which is the only thing which enables the British Empire to hold together

My esteemed friend, M. Charles Gide, of Montpellier, asks in bitter irony how is the Public Debt of France, contracted as an indemnity to the Germans, part of the Public Wealth of France? The answer is simple. That was the price she had to pay to preserve her independence as a nation after the unfortunate result of the war of 1870-71. And is not her independent existence worth the money? Therefore, France is not without a consideration for that Public Debt

The Funds are, therefore, a mass of Exchangeable Property : exactly of the same nature as Bills of Exchange, Bank Credits, Bank Notes : Shares in Commercial Companies : the Goodwill of a business : Copyrights : and all other Incorporeal Property

By contracting Public Loans the State does exactly as every private merchant does who utilises his Credit : it brings into Commerce the **Present Value** of its **Future Income**

### *On the Method of Contracting Public Debts*

#### 11. Public Debts are contracted in three forms—

(1) The Government may be in want of money for current expenses before the taxes come in. In such a case it gives its own **Promissory Notes** and sells them in the market: just in the same way as a private person may ask his banker to discount his Note, in anticipation of his income. The banker discounts his Note and retains the profit at the time of the advance. Private bills are, therefore, always at a discount. But the Government always wishes its Notes to circulate at par: consequently they always promise such an interest as they expect will keep their Notes at par.

These Promissory Notes of the Government are termed **Exchequer Bills**: and as they are intended to be paid off at maturity, like ordinary Bills of Exchange, they are termed the **Floating, or Unfunded, Debt**.

(2) The Government may want a larger sum than can be met by the usual taxes: and they may buy these larger sums by giving in exchange for them **Annuities** terminable at fixed periods. In such cases the Annuity granted is sufficient to pay not only the interest due on the capital, but a portion of the capital itself: so that at the termination of the Annuity the whole principal is paid off, and the Debt extinguished.

(3) The Government may go into the market and offer for sale a perpetual Annuity of 3, 4, or 5 per cent. per annum, for what it will fetch. In this case the Government makes no promise to pay off the principal: but it reserves to itself the right to do so if it pleases. These perpetual Annuities are what are called in common parlance the **Funds**: because the capital is founded, or fixed: and cannot be reclaimed from the State.

We have already shown that the original meaning of **Banco** in Italian is a **Public Debt**: or a sum of money sold to the State by a number of private persons, for which they receive in exchange the Right to demand a series of annual payments: it is also called a **Monte**, or Joint Stock fund. So the legal name of these Public Debts, commonly called the Funds, is **Bank Annuities**.

Formerly every new Loan was secured on certain specific branches of the public revenue: but this for many reasons was found inconvenient. So in the year 1751 all these Debts were consolidated into one sum, and secured on the general revenues.



of the country. Hence they were called **Consolidated Bank Annuities**: which in common usage is abbreviated into **Consols**.

Sometimes the Floating Debt increases to an inconvenient extent, which cannot be redeemed at once, and the holders of it are induced by the Government to accept an Annuity in place of their right to be paid the capital sum. This is termed **Funding** the **Unfunded Debt**

It is sometimes said that the Public Debt of Great Britain is about £750,000,000. This, however, is not a correct way of regarding the matter. The country is not bound ever to pay the sum which would constitute it a Debt. What it has contracted to do is to pay an Annuity of about £27,000,000 a year: and the £750,000,000 is simply the Present Value of this perpetual Annuity

## CHAPTER XII

ON THE INFLUENCE OF MONEY AND CREDIT ON  
PRICES AND THE RATE OF INTEREST

1. We have now to enter upon an inquiry of the greatest importance and complexity—namely, the influence of Money and Credit on Prices, and the Rate of Interest

In 1873 a great change in the relative Value of Gold and Silver began to take place : and Silver began rapidly to fall as compared with Gold. This produced such inconveniences in the Commerce between the countries which used Gold as their Legal Standard, and the countries which used Silver as their Legal Standard, that a Royal Commission was appointed to investigate and report on the subject. With this report, however, we have nothing to do in this place

But Silver continued to fall rapidly in value as compared to Gold : and a very severe and continued depression of the price of a large number of products took place throughout the world : and produced such distress that in 1885 a Royal Commission was appointed to investigate its causes

It had been observed that for a few years previously the supplies of Gold from the mines had diminished in a very slight degree : and it became a very prevalent opinion that the depression in prices, or the appreciation of Gold, as it was termed, was entirely produced by the slightly diminished supplies of Gold

Lord Iddesleigh was chairman of the Commission, and he issued a circular containing a number of questions on the subject. Among the persons to whom Lord Iddesleigh sent this paper was myself. But upon considering the questions, I found that to give a satisfactory answer to them would require a volume. Moreover, to answer them properly would require a complete exposition of the scientific and juridical principles, and the mechanism of the

great system of Credit, of which the general public were completely ignorant. Moreover, however individually distinguished the Commissioners were, there was not a single one of them who was a trained mercantile lawyer: so that in order to make the subject intelligible it would have been necessary to address to the Commission a series of lectures on the Mercantile Law of Credit. Such a course was manifestly impossible, so I thought it advisable not to send in any answers to the paper of questions. I felt that to complete the inquiry it would be necessary to appoint a new commission to deal with the question, with some very distinguished Mercantile Lawyer at its head

It was always acknowledged in a loose kind of way, and it is stated in every text book of Economics, that Credit affects Prices exactly in the same way as Gold: and that prices are governed by the aggregate mass of Gold and Credit. It was therefore obviously absurd to suppose that the very serious depression which had undoubtedly taken place could be caused solely by a minute falling off in the supplies of Gold from the mines. In order to determine what the effect might be, it was necessary to ascertain as near as might be the ratio of Credit to Gold in commerce

The Report of the Commission was felt to be incomplete and unsatisfactory: and in 1886 a new Royal Commission was appointed, with Mr. A. J. Balfour as chairman, to inquire into the causes of the changes in the relative Value of Gold and Silver. After a short time Mr. Balfour's official duties obliged him to resign the chairmanship of the Commission, and Lord Herschell was appointed in his place

### *Question addressed to the Author by the Commission*

2. The Commission did me the honor to request me to lay before them a paper on the relation of Money to Prices. In this paper I began by explaining the broad grounds why Economics can only be made a positive and definite Science by adopting the definition of Wealth as every thing whatever which can be bought and sold, or exchanged, or whose value can be measured in money: in accordance with the unanimous doctrine of ancient writers for 1,300 years: and that Economics is the Science of Commerce, or

Exchanges : as it was expressly declared to be by its founders : and that Abstract Rights are *Pecunia, Res, Bona, Mera* : *χρήματα, πράγματα, ἀγαθά, οὐσία* : goods, chattels, merchandise, commodities : as jurists of all nations have unanimously shown : and which Economists have at last come to recognise, that Money and Credit are quantities of exactly the same nature, as a whole line of writers have shown from Aristotle to Mill : and that the system of Credit consists in the Creation : the Sale or Transfer : and the Extinction of the goods, chattels, commodities, merchandise, termed Credits or Debts

As the exposition of the principles and mechanism of Credit has already been given in the preceding chapters, we need not repeat it here

### *On the Ratio of Money to Credit*

3. It is now universally acknowledged that the Circulating Medium or Currency, or the Measure of Value in which Prices are expressed, consists of Money and Credit or Rights to demand Money, in all its forms both written and unwritten. It is, therefore, evident that we cannot estimate the relation of Money to Prices until we ascertain the ratio of Money to Credit

All Credits payable in Gold—whether Bank Notes, Banking Credits, Bills of Exchange, or any others—have identically the same effects on the Value of Gold and on Prices as an equal quantity of Gold itself : and may be called Gold Credits

Similarly all Credits payable in Silver have identically the same effects on the Value of Silver, and prices estimated in Silver, as an equal quantity of Silver itself : and may be called Silver Credits

And the Value of Gold and Silver with respect to each other is determined, not only by the actual quantity of the metals themselves : but the ratio of the aggregate mass of Gold and all Gold Credits to the aggregate mass of Silver and all Silver Credits.

An instance of this is well known to the officials of the India Office. The fall in the value of the rupee has been usually attributed to the increased supplies of Silver from the mines, and the diminished demand for it, owing to its restriction in use by Germany and various other countries

These circumstances have no doubt had a powerful effect : but there is another circumstance which has never, that we have seen, been sufficiently taken into the popular account

A good many years ago the bills which were drawn by the India Council in London on the different Indian Governments to meet payments in London in Gold did not exceed £3,000,000. But of late years these Council Bills have increased to nearly £20,000,000. Now these Bills have exactly the same effect on the value of Silver as an equal quantity of Silver itself. This increase of about £17,000,000 of Council Bills has exactly the same effect as an additional supply of £17,000,000 of Silver from the mines : and have had an equal effect in lowering the value of the rupee : and just by so much they have increased the embarrassment of the Indian Government

But Credits of all kinds are made payable in Specie : hence in every system of Credit there must be an ultimate reserve of specie in order to enable it to maintain its value

From this it is often supposed that there is some definite fixed ratio between Money and Credit : or, in mathematical language, that Credit is a function of Money

But this is not so : Credit is not a fixed definite function of Money : but it is, if we may coin the term, a *Contingent* function of Money

By which we mean that though in every system of Credit there must be an ultimate reserve of specie, yet that ultimate reserve does not bear a constant fixed ratio to the quantity of Credit : but it mainly depends on the organisation of Credit : the more highly organised the system of Credit is, the less is the requisite amount of the ultimate reserve of specie

The notion that Money must bear a definite fixed ratio to Credit is founded on the idea of Torrens and Mill, which we shall have to examine at greater length in a future chapter, that all Bills of Exchange, Cheques, &c., are ultimately really paid in Money. Such, no doubt, was very probably the case 200 years ago : but this was only the very earliest and rudest organisation of Credit

In Chapter I. we have shown the different ways of settling

mutual Debts, and shown how different is the quantity of Money required according as either of these methods is adopted

In Chapter III. we have shown that, besides payment in Money there are three other methods of extinguishing obligations—(1) *Acceptilation*, or Release : (2) *Novation*, or Renewal or Transfer : and (3) *Compensation*, or set off, where mutual Debts are payments of each other

All ideas that Debts are only paid in Money are utterly obsolete. At the present day not one Bill in 500,000, probably, is ever paid in Money in this country, but by the other methods described in that chapter

We shall now show that any amount of Credit may be created and extinguished without any relation to the quantity of Money

(1) Before the Continental bankers discounted Bills of Exchange, there used to be quarterly fairs at the great towns, Lyons, Antwerp, Nuremberg, Hamburg, and many others

The merchants did not make their Bills payable at their own houses, where they would have been obliged to keep a stock of specie to meet them : but they made them payable only at these fairs. In the meantime their Bills circulated throughout the country and got covered with indorsements, performing all the functions of money

On a fixed day of the fair the merchants met and exchanged their acceptances with each other : these acceptances reciprocally paid and discharged each other : and the obligations were extinguished by the principle of *Compensation*

By this means Boisguillebert says that obligations to the amount of 80,000,000 (livres ?) were extinguished without the use of a sou in money

Now if 80 millions of Credit could be paid and extinguished in this way, it is evident that 800 or 8,000 millions could have been extinguished exactly in the same way : it only required that the mutual obligations should exactly balance each other

(2) When the Bank of England was directed to suspend payments in 1797, the Act did not extend to Scotland. But the Scotch Banks met and agreed to refuse all payment of their Notes in cash : and this they maintained during the whole course

of the war. And though they were liable to an action for so doing, no action was ever brought against a Scotch Bank during the whole period. Thus for 20 years the whole commerce of Scotland was carried on without the use of a single guinea

But though the Banks refused payment of their Notes to the public, they maintained their system of rigorous exchanges among themselves : so that no single Bank was able to continue over-issues : because if it did so it would have had to pay its Notes in Gold or in Bank of England Notes to its competitors. In consequence of this the Scotch Bank Notes always maintained an equality of value with Bank of England Notes ; though of course they shared their depreciation

(3) We have shown that if two persons are customers of the same bank, one of them may pay a debt to the other by giving him a Cheque on his account. The Creditor may pay this cheque into his own account : and the Credit is transferred from the account of the Debtor to that of the Creditor. As soon as that is done the Debt of the Debtor is paid and extinguished exactly the same as if it had been paid in Money. This is a *Novation*

It is obvious that the larger a Bank is, the more numerous are such transactions among its customers : and thus the more payments are made by transfers of Credit, or *Novations*, than by Money : and therefore the larger a Bank is, the smaller is the amount of gold required to be held in reserve

(4) But though the persons dealing with each other may not be customers of the same Bank, yet, by the system of Clearing which we have described, Cheques, Notes, Bills, &c., are transferred just as easily from all the Banks which join in it to each other, as Credits are transferred from one account to another in the same Bank. At the present time Credits to the amount of about £7,000,000,000 are interchanged between the Banks in the London Clearing House alone, and extinguished, without the use of a single coin

There is besides a Country Clearing House in London for country Bills and Notes : and every considerable town in the country has a Clearing House of its own : though they do not publish their accounts : and therefore we have no means of ascertaining their amounts

It is also evident that the more banking habits spread among the people, the more payments will be made by transfers of Credit than by Money : and consequently the less Money will be required to carry on the business of the country

If we could suppose that all the Clearing Houses in the country were dissolved, and we reverted to the old and barbarous method of paying all Debts in actual Gold, the amount that would be required would be something enormous : no one could tell what it would be : it would certainly be some hundreds of millions

All these instances prove the doctrine which we have stated : that though in every system of Credit there must be an ultimate reserve of Gold : yet the ratio of Credit to Gold is not a definite fixed function, but that it depends entirely on the perfection of the organisation of the system of Credit : and the more highly developed and organised the system of Credit is, the less is the amount of Gold required

When the Bank of Scotland was established it was enabled to maintain £50,000 of its Notes in circulation on a reserve of £10,000 in gold : therefore the ratio of Credit to gold was 5 to 1.

The published accounts of the Joint Stock Banks in England show that on an average the reserve they keep is about 12 per cent. of their liabilities : hence the ratio of their Credit to Gold is about 8 to 1

But in Scotland, where the system of Credit is more highly developed and organised than in England, the Banks are able to maintain about £95,000,000 of Banking Credits on a reserve of £4,500,000 of Gold : or the ratio of Credit to Gold is about 23 to 1

All this shows that it is absolutely impossible to determine the ratio of Money to prices

#### *On the Effective Force of Money compared to the Effective Force of Credit*

4. The preceding figures show that the absolute quantity of Credit, as compared to Money, is about 99 to 1. That is, that in all prices 99 parts consist of Credit, and only 1 part of Money : so that if it were possible to imagine that the whole mass of



Credit were annihilated, Gold would rise to about 100 times its present value

But even this gives no adequate idea of the **Effective Force of Credit** as compared to the **Effective Force of Money** : because, as we have shown, the **Effective Force of Money** and of **Credit** is measured, not only by their absolute amount, *but by their Amount multiplied by the Velocity of their Circulation* : which we have named their **Momentum or Duty**

In England the quantity of Money in circulation is extremely small, and is only used in petty retail transactions. The immensely greater part of transactions are effected by Cheques, and Bank Notes in a much smaller degree, and Bills of Exchange

But in Scotland the quantity of Money in circulation is absolutely infinitesimal. The actual specie lies quiescent in the Banks : merely to inspire confidence in the people that it may be had if required

The whole effective work of the country is done by Bank Notes, and in a much smaller degree by Cheques : and, of course, commerce is effected by Bills of Exchange

While the Money lies in the Banks the Notes pass from hand to hand, and do all the work. No one can have the most distant idea as to the number of times that Bank Notes pass in circulation, compared to the infinitesimally minute quantity of Money

*Reply to the Dogma of Smith that an Increase of Money can have no Effect on the Rate of Interest*

5. The expression, **Value of Money**, which has two distinct meanings when applied to two different species of merchandise, namely, **Commodities**, when the **Value of Money** means the quantity of goods that Money will purchase : and **Debts**, where the **Value of Money** is measured by the rate of Interest, or Discount, has given rise to some considerations of a somewhat subtle nature, which we must endeavor to unravel

The **Rate of Interest**, or **Discount**, depends on the ratio of the Money to the Debts : just in the same way as the relations of **Money** and **Commodities** are determined

It might, therefore, appear that a great increase of the precious metals, which leads to a diminution in the Value of Money with respect to one of these classes of merchandise, should also necessarily lead to a diminution in Value of Money with respect to the other

That is to say, that if the Value of Money were to diminish with respect to commodities, so that it required double the quantity of Money to purchase any amount of commodities, it would follow that the Rate of Interest would fall to one half. And, conversely, that if the Value of Money should fall to one-half in the purchase of Debts, the quantity of Money necessary to purchase commodities would be doubled. It would appear at first sight that such an idea as that the Value of Money could diminish one-half with respect to Commodities, and remain the same with respect to Debts, was paradoxical and untenable

Accordingly Smith says<sup>1</sup> that several eminent writers had maintained that the increase of the quantity of Gold and Silver, in consequence of the discovery of the mines in South America, was the real cause of the lowering of the Rate of Interest throughout the greater part of Europe. These metals, they say, having become of less Value (*i.e.*, of less purchasing power with respect to Commodities) themselves, the use of any particular portion of them became of less value too, and consequently the price which should be paid for it

To this obviously fallacious reasoning Smith replies—

“The following very short and plain argument, however, may serve to explain more distinctly the fallacy which seems to have misled these gentlemen. Before the discovery of the Spanish West Indies, 10 per cent. seems to have been the common rate of interest through the greater part of Europe. It has since that time, in different countries, sunk to 6, 5, 4, and 3 per cent. Let us suppose that in every particular country the value of silver has sunk precisely in the same proportion, and that in those countries, for example, where interest has been reduced from 10 to 5 per cent. the same quantity of silver can now purchase just half the quantity of goods which it would have purchased before. This supposition will not, I believe, be found anywhere agreeable to the

<sup>1</sup> *Wealth of Nations*, Bk. II., ch. iv.

truth, but it is the most favorable to the opinion which we are going to examine, and even upon this supposition it is utterly impossible that the lowering of the Value of silver could have the smallest tendency to lower the Rate of Interest. If a hundred pounds are in those countries now of no more value than fifty pounds were then, ten pounds must now be of no more value than five pounds were then; whatever were the causes which lowered the value of the capital, the same must necessarily have lowered that of the interest, and exactly in the same proportion. The proportion between the value of the capital and that of the interest must have remained the same though the rate had never been altered. By altering the rate, on the contrary, the proportion between these two values is necessarily altered. If a hundred pounds are worth no more now than fifty were then, five pounds can be worth no more than two pounds ten shillings were then. By reducing the rate of interest, therefore, from 10 to 5 per cent., we give for the use of capital, which is supposed to be equal to one-half of its former value, an interest which is equal to one-fourth only of the Value of the former interest”

Smith's refutation of the argument alleged for supposing that the increase of money reduced the rate of interest is perfectly conclusive. The fact is simply this : the rate of interest comprehends two elements : one part of the profits paid for the use of money : the other as insurance for the risk of loss. Now no diminution in the value of money with respect to commodities can make the slightest difference in respect to these two elements. Whatever the quantity of goods be, more or less, which £100 will purchase, the part of the profits paid for the use of money will still be the proportion of the £100. Nor can any alteration in the value of money have the slightest effect in influencing the risk of the transaction. Whether the usual price of goods be £100 or £50, it can make no difference in the proportion of the profits agreed to be paid for the use of £100 : nor in the risk : consequently, it can have no influence whatever on the rate of interest.

Smith's refutation of the argument in the particular case he discusses is perfectly conclusive. Nevertheless, his general doctrine that an increase of money can have no influence on the rate of interest in any case, which has been followed by many other

writers, is entirely erroneous, as it is quite easy to show. Smith acknowledges that many writers had observed that the rate of interest had fallen to one-half after the discoveries in America, as Bodin specially remarks, remains as an established fact, and has to be accounted for

The sole difficulty in the case is this : Smith and all modern Economists admit that Bank Notes, Bills of Exchange, &c., are circulating Capital, which perform all the functions of money. But they fail to grasp the conception that Rights of action, such as Credits or Debts, are goods and chattels, commodities, merchandise, just like any material commodities, and that their value is governed by exactly the same laws as that of any other goods

Now let us suppose that a great and sudden increase of money takes place, as happened in the 16th century : then it is evident that its effect on the value of both species of merchandise, Goods and Debts, must be exactly the same

If the whole of the increased quantity of money were applied to the purchase of Goods that would raise the price of Goods

If the whole of the increase of money were applied to the purchase of mercantile Debts, that would raise the price of Debts, *i.e.*, it would lower the rate of Interest

If part of the increased quantity of money were applied to purchase Goods, and part to purchase Debts, that would raise the price of both, that is, it would raise the price of Goods, and it would lower the rate of Interest at the same time

Now this is what actually happened at the time alluded to. Contemporary writers like Bodin observed that the price of commodities was considerably raised by the influx of money : *but only to half the extent which might have been expected*. They also observed that the rate of interest was considerably reduced. And the above reasoning clearly explains both of these observed historical facts

A greatly increased quantity of Credit has identically the same effects : no more striking instance of which can be imagined than what has taken place in this country

Every one knows that, without going too much into details, an enormous rise has taken place in the price of commodities

since the time of William the Conqueror. This is, to a certain extent, to be accounted for by the depreciation of the coinage, as there is only about one third of the amount of metal in the coinage at the present day. That would account for prices being tripled. There has also undoubtedly been a very large increase in the amount of specie in circulation : which would account for another considerable rise in prices. But allowing the utmost latitude for these causes, there is still an immense residual increase, which can by no possibility be accounted for by them

By the Statutes of Eton College, it was enacted that on a certain day in the year all persons on the foundation should receive half a sheep, or threepence, that being the value of half a sheep in 1441, when the College was founded. The Fellows of the College had interpreted this in their own favor, by taking to themselves the value of half a sheep in modern money. But they restricted the gift to the Collegers to the literal threepence. One day, as the Bursar was distributing these threepenny bits to the Collegers at dinner, as was the custom, an audacious young Tug, as Mr. Montague Williams tells us, demanded half a sheep instead : for which piece of temerity he got soundly flogged

Now why has a sheep risen in price from 6*d.* in 1441 to 50*s.* or 60*s.* at the present day ?

In the days of Charles II. the usual average rate of interest was 10 per cent. But not long after the institution of Bankers and the foundation of the Bank of England, it came down to about 3 per cent., and at the present day it is somewhat less than that

Now what has been the cause of this great increase in the Price of Commodities, and great fall in the Rate of Interest ?

It is to be found in the amazing increase of Banking Credits in the last two centuries and a-half

The history of Commerce in those times is exceedingly obscure. But there is no doubt that if the system of discounting mercantile Bills of Exchange did not originate with the goldsmith-bankers in the time of the Commonwealth, at least it received a great extension from them. The greater part of the money of the country having come into their hands, as is described in the next chapter,

for which they paid interest, they had to employ it so as to produce a profit. This they did by discounting mercantile Bills, for which they competed, and so naturally raised their price, *i.e.*, they lowered the rate of interest. But their power of discounting Bills greatly exceeded the sums placed with them by their customers. Because they did not discount them with actual cash: they simply gave their customers a Credit, or Deposit, in their books for them: that is, they issued a Right of action against themselves. They soon found that they could maintain in circulation an amount of Notes several times exceeding the amount of Cash they held. In this rudimentary state of Credit they could not probably maintain in circulation an amount of Notes more than four or five times exceeding the Cash they held. But this had all the practical effects of multiplying their Cash four or five times

When banking was first founded in England the usual rate of interest was 8 or 10 per cent., and the bankers all allowed their customers 6 per cent. on their daily balances payable on demand. But these halcyon days for customers soon passed away. The increased number of bankers multiplied Banking Credits faster than the increase of mercantile Bills: and by the further foundation of the Bank of England, Banking Credits increased so much that the average rate of Interest fell to 3 per cent.

This lowering of the average rate of interest had the effect of immensely raising the value of all property in the form of an Annuity. Thus, when in the reign of Charles II. the average rate of interest was 10 per cent., the value of land was only 10 years' purchase: but when the average rate of interest fell to 3 per cent., the theoretical value of land rose to 33 years' purchase

At this time also began that immense rise in the price of all kinds of commodities: as is noticed in the life of Lord Godolphin

Thus the immense increase of Banking Credits in England produced exactly the same effects in raising the price of commodities and lowering the rate of interest as the great influx of the precious metals did throughout Europe in the 16th century

As far as we have observed, it would appear that the average

rate of interest when Money alone was used, Before the development of Credit, was from 20 to 25 per cent.: it is the immense increase of Banking Credits which has brought it down to 3 per cent.: and even lower

*Has the great Depression in Prices since 1873 been due to Diminished Supplies of Gold*

6. The preceding considerations will enable us to form a judgment on the doctrine, which was so stoutly maintained by many persons, that the great depression in the prices of commodities, which began in 1873, was entirely due to a slight diminution in the supplies of Gold from the mines

Taking the Equation of Value—

$$A = B$$

Let A represent the Circulating Medium, or Currency, which is the measure of Value, in which Prices are expressed, which consists of Metallic Money and Credit in all its forms, both written and unwritten

Let B represent all other Commodities

Then a change in Prices, or the Value of Commodities, takes place either from a change in A: or a change in B: or which is more usual and far more complicated, from a simultaneous change both in A and B

Now it is a well known fact that since 1873 many things have occurred to lower the price of commodities generally classed under B. Diminished cost of production produced by scientific discoveries, increased facilities of transport, enabling agricultural products of all sorts to be imported from a far wider area, as has been well set forth by Lord Playfair in several articles, have all tended to lower prices: and all these have had a certain effect. The Report of the Commission attributed much of the depression to overproduction: nor are we concerned to deny its effect in certain cases

But when we consider A, or the Circulating Medium, or Currency, or the Measure of Value in which Prices are expressed, the Report of the Commission is extremely defective. They had

very little conception of anything beyond a slight diminution in the supplies of Gold. Credit is only alluded to in the most cursory manner, whereas it is the *crux* of the whole question : and popular opinion attributed the general depression almost exclusively to a falling off in the supplies of Gold

Now the considerations set forth in the preceding chapters show that such an idea is perfectly untenable. It is perfectly acknowledged that Credit produces exactly the same effect on Prices as Gold. And it has been shown by authentic statistics, that in modern times Gold only forms about 1 per cent. of the Circulating Medium, or Currency, and that the other 99 per cent. is Credit in its various forms. Moreover, when we consider the effect of any minute variations in the annual supplies of Gold, it must be observed that they form a very minute portion of the already existing quantity in circulation. To suppose that a variation to a small extent of a fraction of 1 per cent. on the amount of the Circulating Medium or the Measure of Value could produce the widespread effect so popularly attributed to it, is wholly beyond reason

Now, allowing that there were other causes at work to produce this depression, one of the most potent causes of the depression of prices was almost entirely overlooked in the Report and in public discussions—namely, the total collapse of speculation after 1873

Altho' speculation is carried on by means of Bills of Exchange. Vast quantities of Bills of Exchange, a large part being of the most illegitimate nature, are created, which partly aggravate the price of commodities, and whose magnitude is partly caused by the expected rise in the price of commodities, are manufactured. These Bills are discounted by Banks, and consequently give rise to an immense increase of Deposits, or Banking Credits : and this vast increase of Credits, both Mercantile and Banking, inflates the Measure of Value, and raises the price of Commodities all round

Then when the bubble bursts, and a great Commercial Crisis ensues, vast amounts of Credit are destroyed : and so the volume of the Currency, or the Measure of Value, is diminished : which produces a general lowering of prices all round. It is these vast



expansions and contractions of Credit which produce those changes in price which are so ruinous to traders, infinitely more than any minute variations in the supplies of Gold

Now it is well known that 1873 was a period of enormous speculation : and the torrents of Credit created by the speculations raised the price of commodities to an extravagant height. But after 1873 came the collapse : and this speculative Credit being destroyed, prices fell as rapidly as they had risen

As far as this, then, there was nothing extraordinary : nor what had not happened times without number before. What was really remarkable and unprecedented was the long period of the depression

On former occasions great speculations had taken place, giving rise to great rises in price and the rate of interest : then the Crisis, which inevitably followed, produced a great depression in prices, and a reduction in the rate of interest

But this reduction in prices, and the rate of interest, pinched severely all persons of narrow income, and they cast about for more remunerative investments. Then speculators saw their opportunity : and got up all sorts of fraudulent schemes to entrap the unwary. Thus speculation spread depression : and depression in its turn bred speculation : in constantly recurring cycles

Now these alternating cycles of speculation and depression are innate in the modern system of Credit : and the truth of this is amply proved by the history of commerce in all countries since the vast expansion of the system of Credit, which took place in the latter half of the seventeenth century. And the most important and complicated problems in Economics are to know how to deal with these Commercial Crises when they arise : to bring them under scientific control : and to prevent them from developing into Monetary Panics : which are the most fearful calamities of modern times

Now one of the principal causes of the great depression since 1873 is, that speculation on a large scale has, from whatever reason, been totally extinct. Either men have learnt wisdom from experience : or they have been unable to discover any commodities to speculate in : or they have been unable to discover

schemes to entrap the unwary: except indeed loans to South American States, which, however, only affect a comparatively small number of persons: and not the whole community as former bursts of speculative mania did. It is not the depression itself, but its unprecedented duration, which is in any way remarkable, and it requires no further observations

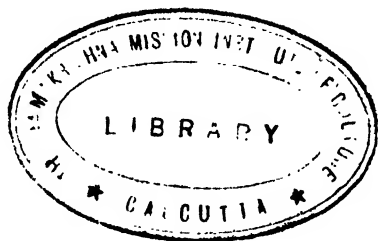
The preceding considerations show how utterly impossible it is to ascertain the precise influence which a little more or a little less Gold has on prices. It is infinitely more complicated than the influx of the precious metals in the 16th century

At that time there was scarcely a Bank in Europe, except in Italy: and when an increase of Gold took place it came at once into contact with commodities: and, therefore, inevitably raised their price

But in modern times an increased quantity of Gold is first paid into Banks, and thus forms a basis for them to enlarge their Credits: and to reduce the rate of interest. Except indeed in the countries, such as California and Australia, where the Gold itself is produced, and the quantity found induces a reckless expenditure on the part of the miners. But elsewhere the comparatively minute quantities of Gold are buried amid such a stupendous mass of Banking Credits that the most subtle analysis in the world is wholly incompetent to discriminate the effects of Gold from those of Credit. It is infinitely more easy to estimate the effects of Gold and Credit combined, than those of Gold alone

One thing may be safely said. Many persons are in alarm that the increased use of Gold as the standard money by various nations may lead to a permanent enhancement of its value, absurdly called Appreciation by some people: and to a depression of prices. Such fears are wholly futile: the earth teems with Gold: new mines are being discovered every day. Within the last few years such astounding discoveries of both Gold and Silver have taken place, as show that in a short time we shall have such an increase of both metals as has not taken place since the discovery of Mexico and Peru. In Colorado, Nevada, Australia, and other places, the supply of Silver seems exhaustless:

and in Gold we have Queensland, Guyana, both British and French, Ecuador, Columbia, South Africa, and now Western Australia, the extent of whose mines is far from being ascertained yet, but which promise to be some of the richest in the world. The cry, therefore, of a scarcity of Gold is a pure delusion. And even if it were not so, we have shown in the preceding chapters what an incredibly small basis of Gold is sufficient to support a vast superstructure of Credit. We have shown that our present Circulating Medium or Currency consists of 99 parts of Credit and only one part of Gold. But our present system is capable of a still higher simplification and organisation. And if such improvement were effected, our present amount of business might be carried on with half the amount of Gold: or our present stock of Gold would carry double the amount of business



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